

UNCLASSIFIED
AD 93805

Armed Services Technical Information Agency

Reproduced by
DOCUMENT SERVICE CENTER
KNOTT BUILDING, DAYTON, 2, OHIO

This document is the property of the United States Government. It is furnished for the duration of the contract and shall be returned when no longer required, or upon recall by ASTIA to the following address: **Armed Services Technical Information Agency, Document Service Center, Knott Building, Dayton 2, Ohio.**

NOTICE: WHEN GOVERNMENT OR OTHER DRAWINGS, SPECIFICATIONS OR OTHER DATA ARE USED FOR ANY PURPOSE OTHER THAN IN CONNECTION WITH A DEFINITELY RELATED GOVERNMENT PROCUREMENT OPERATION, THE U. S. GOVERNMENT THEREBY INCURS NO RESPONSIBILITY, NOR ANY OBLIGATION WHATSOEVER; AND THE FACT THAT THE GOVERNMENT MAY HAVE FORMULATED, FURNISHED, OR IN ANY WAY SUPPLIED THE SAID DRAWINGS, SPECIFICATIONS, OR OTHER DATA IS NOT TO BE REGARDED BY IMPLICATION OR OTHERWISE AS IN ANY MANNER LICENSING THE HOLDER OR ANY OTHER PERSON OR CORPORATION, OR CONVEYING ANY RIGHTS OR PERMISSION TO MANUFACTURE, USE OR SELL ANY PATENTED INVENTION THAT MAY IN ANY WAY BE RELATED THERETO.

UNCLASSIFIED

AD No. 93805
ASTIA FILE COPY

A RESEARCH STUDY OF THE PREDICTION OF ADAPTABILITY TO THE NAVY

By:
WILLIAM A. GORHAM
WILLIAM S. BARKER
THOMAS E. HANLON
HARRY J. OLDER

FC

A RESEARCH REPORT CONDUCTED FOR THE BUREAU
OF MEDICINE AND SURGERY, DEPARTMENT OF THE
NAVY UNDER CONTRACT NONR-1484 (00), OFFICE OF
NAVAL RESEARCH.

PRA REPORT 56-9 • MAY 1956

PSYCHOLOGICAL RESEARCH ASSOCIATES

1025 CONNECTICUT AVENUE, NORTHWEST

WASHINGTON 6, D. C.

A RESEARCH STUDY
OF
THE PREDICTION OF ADAPTABILITY TO THE NAVY

FINAL REPORT

BY:

WILLIAM A. GORHAM
WILLIAM S. BARKER
THOMAS E. HANLON
HARRY J. OLDER

A RESEARCH PROJECT CONDUCTED FOR THE BUREAU
OF MEDICINE AND SURGERY, DEPARTMENT OF THE
NAVY UNDER CONTRACT NONR - 1484(00), OFFICE
OF NAVAL RESEARCH.

PRA REPORT 56-9

MAY 1956

PSYCHOLOGICAL RESEARCH ASSOCIATES
1025 CONNECTICUT AVENUE, NORTHWEST
WASHINGTON 6, D.C.

TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
ACKNOWLEDGEMENTS	III
I INTRODUCTION AND BACKGROUND.	I
II REVIEW OF LITERATURE ON PSYCHIATRIC SCREENING RESEARCH . . .	6
III DEVELOPMENT OF THE MULTIPLE FACTOR FORCED CHOICE PERSONALITY INVENTORY . .	23
IV DATA COLLECTION AND ANALYSIS	34
BIBLIOGRAPHY	42
 <u>APPENDIX</u>	
A ITEMS USED TO CONSTRUCT TRIADS	45
B THE MFFC PERSONALITY INVENTORY	
C ADMINISTRATIVE DIRECTIONS	

ACKNOWLEDGEMENTS

WE WISH TO EXPRESS OUR APPRECIATION TO ALL OF THE NAVY PERSONNEL WHO MADE THIS RESEARCH POSSIBLE. IN PARTICULAR, WE WOULD LIKE TO THANK LCDR ROBERT S. HERRMANN, MSC, HEAD, CLINICAL PSYCHOLOGY SECTION, PROFESSIONAL DIVISION, BUREAU OF MEDICINE AND SURGERY, FOR HIS CONTINUED COOPERATION AND ADVICE THROUGHOUT THE ENTIRE STUDY.

FOR AID IN FACILITATING THE PRELIMINARY DATA COLLECTION AT THE NAVAL TRAINING STATION, BAINBRIDGE, MARYLAND, WE WISH TO THANK LCDR J. M. LAUDENSLAGER, MSC, AND HIS STAFF.

FOR HIS ASSISTANCE DURING THE FINAL DATA COLLECTION AT NORFOLK, VIRGINIA, WE WISH TO THANK LTJG C. B. RUSH, MC, COMDESLANT MEDICAL REPRESENTATIVE IN THE NORFOLK AREA.

FOR THEIR COOPERATION AND ASSISTANCE IN THE ACTUAL DATA COLLECTION, WE WISH TO EXPRESS OUR THANKS TO THE OFFICERS AND MEN OF THE USS RICH, USS NEW, USS CONE, USS HOLDER, USS STRIBLING, AND THE USS MEREDITH. PARTICULAR THANKS ARE DUE THE CHIEF HOSPITAL CORPMEN WHO UNDERTOOK THE LABORIOUS CHORES OF ADMINISTERING THE RESEARCH INSTRUMENTS.

HMC A. E. ALBRIGHT

HMC J. K. HILLIARD

HMC P. E. COLLINS

HMC R. J. MILLER

HMC J. T. DICE

HMC L. SHAW

DR. WILLIAM A. GORHAM CONCEIVED THE MFFC PERSONALITY INVENTORY AND DID MUCH TO DEVELOP IT. MR. THOMAS E. HANLON IS RESPONSIBLE FOR THE LITERATURE REVIEW.

RESEARCH STUDY OF PREDICTION OF ADAPTABILITY TO THE NAVY

FINAL REPORT

CHAPTER I

INTRODUCTION AND BACKGROUND

THIS IS THE FINAL REPORT OF A RESEARCH STUDY OF RELATIONSHIPS BETWEEN FLEET PERFORMANCE AND PSYCHIATRIC PREDICTION. IN A PREVIOUS REPORT, TECHNICAL REPORT NUMBER 1 (14), THE DEVELOPMENT AND CONSTRUCTION OF THREE MEASURES OF ADJUSTMENT TO LIFE IN THE NAVY WERE DESCRIBED. THESE MEASURES ARE BRIEFLY REVIEWED IN A LATER SECTION OF THIS CHAPTER. THEY HAVE MET WITH CONSIDERABLE ACCEPTANCE AMONG NAVAL PERSONNEL. THE ADMINISTRATION OF THE INSTRUMENTS AS DESCRIBED IN TECHNICAL REPORT NUMBER 1, DEMONSTRATED THAT RELIABLE ASSESSMENT OF ADJUSTMENT TO THE NAVY WAS POSSIBLE.

THE DESIRABILITY OF PREDICTING SUCH CRITERIA IS REFLECTED IN THE PURPOSE OF THAT RESEARCH, THE RELATING OF FLEET PERFORMANCE AND PSYCHIATRIC PREDICTION. AS INDICATED IN THE PREVIOUS REPORT AND IN A LATER SECTION OF THIS CHAPTER, PREDICTORS CURRENTLY IN USE IN THE NAVY SCREENING PROGRAM DO NOT SATISFACTORILY PREDICT THE CRITERIA. THE RESEARCH DESCRIBED IN LATER CHAPTERS OF THIS REPORT WAS UNDERTAKEN IN ORDER TO EXPLORE VARIABLES OTHER THAN THOSE NOW USED.

AS WILL BE SEEN, IT IS REASONABLE TO INFER THAT BOTH NEGATIVE AND POSITIVE MALINGERING CONTRIBUTED TO THE LACK OF PROGNOSTIC VALIDITY. THE EXPLORATORY STUDY DESCRIBED IN LATER CHAPTERS WAS DESIGNED TO MINIMIZE THIS FACTOR OF "FAKING" AND TO INCORPORATE WHAT APPEARED TO BE "BEST PREDICTOR BETS." A REVIEW OF LITERATURE ON PSYCHIATRIC SCREENING RESEARCH WAS USEFUL IN HELPING TO IDENTIFY THOSE VARIABLES WITH THE GREATEST APPARENT VALUE. NO ATTEMPT WAS MADE

TO CONSTRUCT DEFINITIVE MEASURES TO BE USED IN SCREENING. RATHER, THE ORIENTATION WAS TOWARD TWO OUTCOMES:

1. THE PROVISION OF A FRAMEWORK FOR STRUCTURING NAVY PSYCHIATRISTS' EVALUATIONS OF RECRUITS.
2. THE DEVELOPMENT OF A BASIS FOR THE CONSTRUCTION OF OBJECTIVE MEASURES OF PREDICTORS OF ADJUSTMENT TO THE NAVY.

A REVIEW OF THE PREVIOUS REPORT, TECHNICAL REPORT NUMBER 1, FOLLOWS. ALSO INCLUDED IN THIS CHAPTER IS A STUDY OF THE VALIDITY OF PERSONALITY QUESTIONNAIRE ITEMS OF MEDICAL SCREENING FORM A. THE LATTER STUDY IS A LOGICAL EXTENSION OF THE WORK REPORTED PREVIOUSLY. A REVIEW OF LITERATURE ON PSYCHIATRIC SCREENING RESEARCH IS PRESENTED IN THE NEXT CHAPTER. OTHER CHAPTERS OF THE REPORT ARE DEVOTED TO A DESCRIPTION OF THE DEVELOPMENT AND ANALYSIS OF THE PREDICTOR RESEARCH INSTRUMENT.

REVIEW OF TECHNICAL REPORT NUMBER 1

THE MAJOR PURPOSE OF THE RESEARCH REPORTED IN TECHNICAL REPORT NUMBER 1 WAS TO EVALUATE THE PREDICTIVE ASPECT OF THE "S" RATING OF THE PULHES PROFILE. THIS RATING REFLECTS THE PSYCHIATRIST'S ESTIMATE OF THE RECRUIT'S CURRENT PSYCHOLOGICAL ADJUSTMENT AS WELL AS A PREDICTION OF THE RECRUIT'S FUTURE ADAPTABILITY TO THE NAVY. IN ADDITION TO EVALUATING PSYCHIATRIC RATINGS, OTHER PREDICTORS WHICH WERE FOUND ON THE MEDICAL SCREENING FORM A WERE EVALUATED IN TERMS OF HOW THEY RELATE TO LATER NAVY ADAPTABILITY.

TECHNICAL REPORT NUMBER 1 DESCRIBES HOW THE CRITERIA OF LATER ADAPTABILITY WERE DEVELOPED. ADAPTABILITY OR LATER ADJUSTMENT WAS MEASURED BY INSTRUMENTS DESIGNED TO DETERMINE (1) THE SATISFACTION OF THE MAN HIMSELF (JOB ADJUSTMENT

INVENTORY), (2) THE SATISFACTION OF THE MAN'S SUPERVISORS WITH HIM (PERFORMANCE RATING SCALE), AND (3) THE SATISFACTION OF THE MAN'S ASSOCIATES WITH HIM (PEER NOMINATIONS). COLLECTION OF CRITERION DATA ON MEN ON WHOM PREDICTOR INFORMATION WAS AVAILABLE WAS ALSO DESCRIBED. THE PREDICTOR DATA ("S" RATINGS AND BIOGRAPHICAL INFORMATION) WERE THEN STATISTICALLY RELATED TO THE CRITERIA. THE CONCLUSIONS REACHED IN THE REPORT ARE:

1. THE "S" SCALE APPEARS TO HAVE NO PROGNOSTIC VALUE FOR LATER ADJUSTMENT TO THE NAVY.
2. BIOGRAPHICAL MATERIAL CONTAINED IN THE MEDICAL SCREENING FORM A HAS LITTLE VALUE IN PREDICTING LATER ADJUSTMENT.

IN TECHNICAL REPORT NUMBER 1, IT WAS RECOMMENDED THAT THE PERSONALITY QUESTIONNAIRE ON THE BACK OF THE STANDARD MEDICAL SCREENING FORM A BE ANALYSED TO DETERMINE THE VALIDITY OF THIS QUESTIONNAIRE IN PREDICTING LATER ADJUSTMENT. IT WAS ALSO RECOMMENDED THAT RESEARCH BE INITIATED TO DETERMINE WHAT FACTORS, OTHER THAN BIOGRAPHICAL, ARE CORRELATES OF LATER NAVY ADJUSTMENT, HOW THESE FACTORS CAN BE MEASURED EFFICIENTLY, AND HOW WELL THE MEASUREMENT OF THE FACTORS PREDICTS LATER ADJUSTMENT.

ANALYSIS OF THE MEDICAL SCREENING FORM A PERSONALITY QUESTIONNAIRE

FOLLOWING THE RECOMMENDATIONS MADE IN TECHNICAL REPORT NUMBER 1, AN ITEM ANALYSIS WAS MADE OF THE PERSONALITY QUESTIONNAIRE CONTAINED ON THE BACK OF THE MEDICAL SCREENING FORM A. THIS SECTION PRESENTS THE RESULTS OF THAT ANALYSIS.

PROBLEM: AS DESCRIBED IN TECHNICAL REPORT NUMBER 1, AS AN ADJUNCT TO THE BRIEF PSYCHIATRIC INTERVIEW, EACH RECRUIT, WHEN HE ENTERS THE NAVY, IS ASKED A SERIES OF MORE-OR-LESS STANDARD QUESTIONS RELATING TO HIS PERSONAL ADJUSTMENT.

ON THE BASIS OF THE RECRUIT'S ANSWERS TO THESE QUESTIONS AND HIS OVERT BEHAVIOR DURING THE INTERVIEW, THE PSYCHIATRIST EVALUATES THE RECRUIT'S LEVEL OF ADJUSTMENT. THIS EVALUATION IS CONSIDERED PROGNOSTIC AS WELL AS DIAGNOSTIC.

THE 70-ITEM QUESTIONNAIRE ON THE BACK OF MEDICAL SCREENING FORM A HAD BEEN SUBJECTED TO ANALYSES BY RESEARCH PERSONNEL AT BAINBRIDGE NAVAL TRAINING STATION. AS A RESULT OF THIS RESEARCH, A 33-ITEM QUESTIONNAIRE HAD BEEN DEVELOPED AND HAD BEEN ADMINISTERED AT THAT STATION FOR SOME TIME. THE PRESENT ANALYSIS OF THE QUESTIONNAIRE WAS DONE TO INVESTIGATE ITS PROGNOSTIC VALIDITY.

SUBJECTS. FROM THE ORIGINAL SAMPLE OF 413 SUBJECTS ON WHOM CRITERION DATA WERE COLLECTED FOR THE RESEARCH REPORTED IN TECHNICAL REPORT NUMBER 1, INFORMATION ON THE 33-ITEM QUESTIONNAIRE WAS OBTAINED ON 196 MEN WHO RECEIVED THEIR INITIAL PSYCHIATRIC EXAMINATION AT THE NAVAL TRAINING STATION, BAINBRIDGE, MARYLAND.

PROCEDURE. THE 196 SUBJECTS WERE RANKED ACCORDING TO THEIR CRITERION SCORES AND RANDOMLY DISTRIBUTED INTO TWO GROUPS OF 100 AND 96. THE FREQUENCY OF UNFAVORABLE RESPONSES WAS TABULATED FOR EACH OF THE 33 ITEMS IN THE QUESTIONNAIRE FOR THE SUBSAMPLE OF 100. THE RESULTING INDIVIDUAL ITEM FREQUENCIES FOR THE GROUP WERE TOO SMALL FOR AN ITEM ANALYSIS METHOD OF INVESTIGATION. THE TOTAL NUMBER OF UNFAVORABLE RESPONSES FOR THE UPPER 27% AND LOWER 27% OF THE SUBSAMPLE WERE THEN OBTAINED FOR ALL 33 ITEMS. ON THE BASIS OF THE RATIO OF UNFAVORABLE TO FAVORABLE RESPONSES IN THE LOWER VS. THE UPPER CRITERION GROUPS, A CUT-OFF SCORE WAS ESTABLISHED TO DIFFERENTIATE THE GROUPS. THE CROSS-VALIDATION SAMPLE IN TERMS OF UNFAVORABLE RESPONSES WAS THEN SORTED ON THE BASIS OF A CUT-OFF POINT OF UNFAVORABLE VS. FAVORABLE RESPONSES INTO PREDICTED UPPER AND

LOWER ADJUSTMENT GROUPS AND THE ACTUAL UPPER AND LOWER PERFORMANCE GROUPS, WITH ACTUAL ADJUSTMENT SCORES SPLIT AT THE MEAN.

RESULTS. THE RANGE OF UNFAVORABLE RESPONSES FOR THE 33 ITEMS IN THE QUESTIONNAIRE FOR THE VALIDATION SAMPLE OF 100 WAS FROM ZERO TO ELEVEN, WITH A MODAL VALUE OF TWO. FROM INSPECTION ALONE, IT COULD BE SEEN THAT SUBJECTS IN THE UPPER AND LOWER CRITERION GROUPS RESPONDED TO NONE OF THE ITEMS IN A MANNER SIGNIFICANTLY DIFFERENT FROM WHAT MIGHT HAVE BEEN EXPECTED BY CHANCE.

THE NUMBER OF UNFAVORABLE RESPONSES FOR THE TOTAL QUESTIONNAIRE MADE BY THE UPPER AND LOWER CRITERION GROUPS WERE 28 AND 60 RESPECTIVELY. ON THE BASIS OF THIS APPROXIMATE RATIO OF ONE TO TWO, A CUT-OFF SCORE OF TWO WAS ESTABLISHED TO PREDICT CRITERION SCORES OF THE SECOND SUBSAMPLE. THIS SUBSAMPLE WAS THEN SORTED INTO TWO GROUPS ON THE BASIS OF ZERO AND ONE VS. TWO OR MORE UNFAVORABLE QUESTIONNAIRE RESPONSES. THE STATISTICALLY INSIGNIFICANT TETRACHORIC CORRELATION BETWEEN THIS DICHOTOMY AND THE CRITERION DICHOTOMIZED AT THE MEAN WAS .07.

CONCLUSIONS. THE 33-ITEM QUESTIONNAIRE GIVEN TO NAVY RECRUITS AS A PART OF THEIR INITIAL PSYCHIATRIC SCREENING DOES NOT APPEAR TO HAVE STATISTICALLY SIGNIFICANT PROGNOSTIC VALIDITY AGAINST CRITERIA OF THIS TYPE. THIS, OF COURSE, DOES NOT MEAN THAT THE QUESTIONNAIRE IS NOT A USEFUL ADJUNCT TO THE SCREENING PROCESS WHERE THE PRIMARY PROBLEM IS TO IDENTIFY QUICKLY RECRUITS FOR MORE INTENSIVE STUDY.

CHAPTER II

REVIEW OF LITERATURE ON PSYCHIATRIC SCREENING RESEARCH

THIS CHAPTER PRESENTS THE RESULTS OF A LITERATURE SURVEY ON MILITARY PSYCHIATRIC SCREENING RESEARCH. DURING THIS BACKGROUND ANALYSIS, SPECIAL ATTENTION WAS GIVEN TO THE RESEARCH METHODOLOGIES EMPLOYED, THE CRITERIA OF ADJUSTMENT EMPLOYED, AND THE PREDICTORS WHICH RELATED SIGNIFICANTLY TO THOSE CRITERIA. THROUGH THIS LITERATURE SEARCH AND FROM KNOWLEDGE GAINED IN EARLIER RESEARCH, IT WAS HOPED THAT IDEAS WOULD BE OBTAINED WHICH WOULD CONTRIBUTE TO SELECTING OR DEVISING PREDICTORS MEASURING FACTORS HAVING HIGH RELATIONSHIPS WITH THE CRITERIA OF ADJUSTMENT DEVELOPED IN THE FIRST PHASE OF THIS RESEARCH.

DIAGNOSIS VERSUS PROGNOSIS

THE AMOUNT OF RESEARCH THAT HAS BEEN DONE IN THE AREA OF PSYCHIATRIC SCREENING OF MILITARY PERSONNEL HAS BEEN VOLUMINOUS (24). SO MANY OF THE STUDIES DEAL WITH THE VALIDATION OF SCREENING PERSONALITY INVENTORIES AS DIAGNOSTIC INDICATORS OF PERSONALITY ADJUSTMENT THAT THE TERMS PSYCHIATRIC SCREENING AND DIAGNOSTIC SCREENING HAVE BECOME ALMOST SYNONYMOUS. HOWEVER, WITH THE SLACKENING OF THE MILITARY MANPOWER DEMANDS AFTER WORLD WAR II AND THE CORRESPONDINGLY GREATER EMPHASIS ON THE "SCREENING IN" OF SUITABLE RECRUITS, THE PROGNOSTIC ROLE OF PSYCHIATRIC SCREENING HAS EMERGED AS ONE OF THE PRIMARY FUNCTIONS OF THE SCREENING PROCESS. THE ESSENTIAL DIFFERENCE IN THE DIAGNOSTIC AND PROGNOSTIC FUNCTIONS OF SCREENING LIES IN THE PARTICULAR CRITERION USED.

IN THOSE STUDIES DEALING WITH THE DIAGNOSTIC VALIDITY OF THE SCREENING INSTRUMENTS, A PSYCHIATRIC CRITERION IS USED AS A VALIDATING MEASURE OF ADJUSTMENT. THIS IS A PSYCHIATRIST'S DIAGNOSIS OF A RECRUIT'S NEUROPSYCHIATRIC FITNESS FOR MILITARY DUTY, MADE AS A RESULT OF A PSYCHIATRIC EXAMINATION. THIS

EXAMINATION IS GIVEN AT THE SAME TIME AS, BUT INDEPENDENTLY OF THE SCREENING INSTRUMENTS TO BE VALIDATED. IN THOSE STUDIES DEALING WITH THE PROGNOSTIC VALIDITY OF SCREENING INSTRUMENTS, THE CRITERION OF ADJUSTMENT IS USUALLY SOME MEASURE OF BEHAVIOR DEVELOPED UNDER THE SAME CIRCUMSTANCES AND AT THE SAME TIME THE PREDICTED BEHAVIOR IS TO OCCUR. RELATIVE ADJUSTMENT AT THIS LATER IN-SERVICE PERIOD MAY BE DETERMINED THROUGH A PSYCHIATRIC EVALUATION, EXAMINATION OF HEALTH AND SERVICE RECORDS, ADMINISTRATION OF PERSONALITY AND SOCIOMETRIC INVENTORIES, OR OTHER METHODS WHICH MIGHT BE INDICATIVE OF SERVICE ADAPTABILITY.

DIAGNOSTIC PSYCHIATRIC SCREENING RESEARCH. IN A REPORT ON THE VALIDITY OF PERSONALITY INVENTORIES IN MILITARY PRACTICE, WHICH REPRESENTS AN EXTENSIVE REVIEW OF THE LITERATURE ON THIS SUBJECT, ELLIS AND CONRAD (10) CONCLUDE THAT SUCH INSTRUMENTS HAVE A VALID DIAGNOSTIC FUNCTION IN PSYCHIATRIC SCREENING. MOST OF THE FINDINGS UP TO THE PRESENT SUPPORT THIS CONCLUSION. ALTHOUGH SCREENING INSTRUMENTS DO NOT ALWAYS SIGNIFICANTLY DIFFERENTIATE ADJUSTED AND MALADJUSTED GROUPS WHEN USED ALONE, CLINICAL JUDGMENTS BASED ON A BATTERY OF SUCH INSTRUMENTS AGREE QUITE HIGHLY WITH SUBSEQUENT PSYCHIATRIC EVALUATIONS. A COMPREHENSIVE COVERAGE OF DIAGNOSTIC PSYCHIATRIC SCREENING RESEARCH MAY BE FOUND IN DUNCOMBE (9), ELLIS AND CONRAD (10), SINGER (27), WEXLER (31), AND ZUBIN (34).

PROGNOSTIC PSYCHIATRIC SCREENING RESEARCH. TWO TYPES OF STUDIES DEALING WITH THE PREDICTION OF SERVICE ADAPTABILITY MAY BE FOUND IN THE CURRENT LITERATURE:

1. THOSE THAT HAVE USED PERFORMANCE MEASURES AS CRITERIA
2. THOSE THAT HAVE USED PSYCHIATRICALY ORIENTED MEASURES OF ADJUSTMENT AS CRITERIA

1. PERFORMANCE CRITERIA. MOST STUDIES ON PSYCHIATRIC PREDICTION HAVE USED AS THEIR CRITERIA LATER IN-SERVICE PERFORMANCE MEASURES SUCH AS PASS-FAIL CLASSIFICATIONS IN TRAINING SCHOOLS. THESE STUDIES HAVE GENERALLY FAILED TO SHOW POSITIVE RELATIONSHIPS BETWEEN PSYCHIATRIC PREDICTIONS AND THESE CRITERION MEASURES. THIS IS NOT SURPRISING SINCE MOST OF THE PERFORMANCE MEASURES USED AS CRITERIA HAVE PRIMARILY INVOLVED INTELLIGENCE, APTITUDE, AND PHYSIOLOGICAL VARIABLES, THUS MAKING THE RELATIONSHIP BETWEEN PERSONALITY PREDICTORS AND SUBSEQUENT PERFORMANCE A RESIDUAL ONE. REVIEWS OF PERFORMANCE STUDIES THAT HAVE BEEN DONE SO FAR MAY BE FOUND IN DUNCOMBE (9), ELLIS AND CONRAD (10), FINESINGER ET AL (11), AND GUILFORD (15). ONE OF THE REVIEWED STUDIES WILL BE MENTIONED HERE BECAUSE OF ITS EMPHASIS ON PERSONALITY VARIABLES IN BOTH PREDICTOR AND CRITERION MEASURES. IN THIS STUDY INTELLIGENCE AND PHYSICAL FACTORS WERE HELD RELATIVELY CONSTANT THROUGH HIGHLY SELECTIVE SCREENING PROCEDURES WITH THE RESULT THAT THE PROPORTION OF THE VARIANCE IN PERFORMANCE ATTRIBUTABLE TO PERSONALITY FACTORS WAS CORRESPONDINGLY INCREASED.

IN A SCREENING STUDY OF OFFICER CANDIDATES FOR THE MARINE CORPS, ROHRER FOUND A RELATIONSHIP BETWEEN CERTAIN PERSONALITY TYPES AND SUCCESSFUL CANDIDATES, USING AS CRITERIA FOR SUCCESS BOTH THE RANKING IN BASIC TRAINING SCHOOL AND PSYCHIATRIC RATINGS. ALTHOUGH THESE WERE RECOGNIZED AS INTERMEDIATE MEASURES, THEY WERE CONSIDERED SUFFICIENT FOR THE VALIDATION OF SELECTION HYPOTHESES. OBSESSIVE, CYCLOTHYMIC, AND HYSTERIC PERSONALITY TYPES TENDED TO BE SUCCESSFUL. THE CLASSIFICATIONS WHICH CHARACTERIZED THE UNSUCCESSFUL CANDIDATE WERE PSYCHOPATHIC AND "OTHER" (IN WHICH IT WAS NOT POSSIBLE TO

IDENTIFY A SINGLE CLEAR PERSONALITY TYPE). ROHRER ALSO FOUND MANY PERSONAL HISTORY ITEMS WHICH SIGNIFICANTLY DISCRIMINATED HIGH AND LOW RANKED CANDIDATES, HOWEVER, THESE ITEMS WERE NOT CROSS-VALIDATED ON ANOTHER SAMPLE.

2. ADJUSTMENT CRITERIA. ALTHOUGH RELATIVELY FEW IN NUMBER, PSYCHIATRIC PREDICTION STUDIES WHICH HAVE AS THEIR CRITERIA LATER IN-SERVICE MEASURES OF ADJUSTMENT OFFER THE ONLY DEPENDABLE SOURCES OF INFORMATION ON THIS PARTICULAR PROBLEM. THIS IS TRUE SINCE THE PREDICTIVE VALIDITY OF PSYCHIATRIC MEASURES REQUIRES THAT THE VARIANCE IN PREDICTED BEHAVIOR BE DUE PRIMARILY TO PERSONALITY FACTORS. SERVICE PERFORMANCE SHOULD THEREFORE BE MEASURED IN TERMS OF THESE FACTORS. EMPHASIS OF THIS PRESENT LITERATURE SURVEY HAS BEEN PLACED ON THOSE STUDIES UTILIZING SUCH ADJUSTMENT CRITERIA. A BREAKDOWN ACCORDING TO METHODOLOGY INTO VALIDATION AND CROSS-VALIDATION TYPE STUDIES WAS MADE SO THAT RESULTS COULD BE EVALUATED ACCORDINGLY.

VALIDATION STUDIES

IN MILITARY RESEARCH ON THE ADAPTABILITY OF MEN TO SERVICE LIFE, THE HISTORICAL-EXPERIMENTAL METHOD OF INVESTIGATION HAS BEEN EXTENSIVELY USED. IN THIS METHOD, HYPOTHESES REGARDING THE RELATIONSHIPS OF VARIABLES ARE VALIDATED ON DATA THAT ARE ALREADY COLLECTED OR THAT WILL BE AVAILABLE AFTER A PERIOD OF TIME. USUALLY NO CROSS-VALIDATION PROCEDURES ARE ATTEMPTED AS A MORE RIGOROUS TEST OF THESE HYPOTHESES. OTHER STUDIES MAY BE CITED WHICH ARE NOT OF THE HISTORICAL-EXPERIMENTAL TYPE, BUT WHICH SHARE ITS CHARACTERISTIC LACK OF CROSS-VALIDATION. A REVIEW OF RELEVANT VALIDATION STUDIES FOLLOWS.

USING A SAMPLE OF 17,000 NAVY RECRUITS FROM THREE TRAINING CENTERS,

HUNT (16-17) HAS DONE A THOROUGH ANALYSIS OF SCREENING EFFICIENCY WITH LATER PSYCHIATRIC ATTRITION RATE OF NAVAL PERSONNEL AS THE MAJOR CRITERION. HE HAS SHOWN THAT PSYCHIATRIC ATTRITION IS INVERSELY RELATED TO SCREENING RATE; THE GREATER PERCENT OF MEN RELEASED FOR MALADJUSTMENT REASONS AS A RESULT OF THE INITIAL SCREENING (UP TO A SPECIFIC CUT-OFF POINT); THE SMALLER PERCENT OF PSYCHIATRIC ATTRITION IN SUBSEQUENT DUTY YEARS. THE METHOD OF ANALYSIS IN THESE STUDIES WAS TO DETERMINE PERCENTAGE DIFFERENCES IN NEUROPSYCHIATRIC DISCHARGES OF MEN WHO HAD BEEN SCREENED AT THREE TRAINING STATIONS WHERE SCREENING DISCHARGE RATES WERE SIGNIFICANTLY DIFFERENT. A TYPICAL EXAMPLE OF HIS FINDINGS IS THE FOLLOWING. DURING THE MONTH OF APRIL 1943, THE SCREENING DISCHARGE RATES AT THE GREAT LAKES, NEWPORT, AND SAMPSON TRAINING CENTERS WERE 4.5%, 2.6%, AND 0.7%. THE SUBSEQUENT ATTRITION RATES (AFTER TWO AND ONE-HALF YEARS) OF THE MEN SAMPLED DURING THIS MONTH WERE 1.5%, 1.8%, AND 3.0%.

THE ABOVE RESULTS OFFER POSITIVE INDICATION OF THE VALIDITY OF THE SCREENING PROCESS; THAT IS, THOSE MEN WHO WERE LIKELY TO BE NEUROPSYCHIATRIC CASUALTIES WERE BEING DETECTED AND DISCHARGED. THE PREDICTION ELEMENT IS INVOLVED IN THE AMOUNT OF OVERALL SERVICE MALADJUSTMENT THAT IS TO BE EXPECTED WITH VARYING SELECTION RATIOS. ONE CAN PREDICT AN INCREASE IN PSYCHIATRIC ATTRITION WITH A DECREASE IN PERSONALITY ACCEPTABILITY STANDARDS. UNFORTUNATELY, FROM THE ABOVE RESULTS NOTHING CAN BE SAID REGARDING SPECIFIC PREDICTOR INSTRUMENT VALIDITIES BEYOND THE FACT THAT THEY MAY HAVE BEEN CONTRIBUTING FACTORS TO OVERALL SCREENING EFFICIENCY.

ATTACKING THE PROBLEM OF PREDICTION MORE DIRECTLY, HUNT (32) STUDIED THE RECORDS OF 944 MEN WHOSE PERSONALITY DIFFICULTIES HAD BEEN CLASSIFIED AS "MILD", "MODERATE", AND "SEVERE" AS A RESULT OF A BRIEF PSYCHIATRIC INTERVIEW. THE SUBSEQUENT DISCHARGE RATES OF THESE THREE CATEGORIES AFTER A PERIOD OF A YEAR

WERE 6.5%, 20.2%, AND 89.7% RESPECTIVELY. IN A SIMILAR STUDY (33) OF 242 RECRUITS WHOSE PERSONALITY DIFFICULTIES WERE LISTED AS "MILD" AFTER PSYCHIATRIC SCREENING, THE SUBSEQUENT ATTRITION RATE WAS 12.8%. THIS PERCENTAGE WAS SEVEN TIMES THAT OF THE NORMAL CONTROL GROUP AND THREE TIMES THE ESTIMATED NAVY RATE FOR THE PERIOD.

AITA (1) ACHIEVED SIMILAR RESULTS IN HIS STUDY ON THE EFFICACY OF THE BRIEF CLINICAL INTERVIEW METHOD IN PREDICTING LATER SERVICE ADJUSTMENT. IN A FIVE YEAR FOLLOW-UP STUDY OF 304 ARMY INDUCTEES WHO WERE CLASSIFIED AS GOOD AND BAD PROSPECTS FOR SERVICE ADJUSTMENT AS A RESULT OF A SCREENING INTERVIEW, HE FOUND THAT A SIGNIFICANTLY GREATER NUMBER OF THE "PREDICTED GOOD" MEN SUCCESSFULLY ADJUSTED TO THE SERVICE. JUDGMENTS OF RELATIVE ADJUSTMENT MADE AFTER AN EXAMINATION OF HEALTH AND SERVICE RECORDS WERE USED AS CRITERIA OF ADJUSTMENT. THE RESULTING FIGURES WERE: 95 GOOD ADJUSTMENTS OF 100 PREDICTED GOOD, AND 21 BAD ADJUSTMENTS FROM 100 PREDICTED BAD. IT SHOULD BE NOTED, HOWEVER, THAT 79% OF THOSE PREDICTED BAD ACTUALLY BECAME SATISFACTORILY ADJUSTED.

THE ABOVE FINDINGS ARE PRESENTED AS AN INDICATION OF THE EFFECTIVENESS OF PREDICTION OF ADJUSTMENT MADE AFTER PSYCHIATRIC SCREENING. HOWEVER, THESE FIGURES ALSO INDICATE THAT MILD MALADJUSTMENT DOES NOT NECESSARILY RULE OUT SUCCESSFUL MILITARY SERVICE. AS HUNT CONCLUDED, ALTHOUGH THE DISCHARGE RATES OF BORDERLINE NEUROPSYCHIATRIC CASES ARE HIGHER THAN FOR NORMALS, THEY ARE NOT HIGH ENOUGH TO PRECLUDE VALUABLE SERVICE FROM THE GROUP AS A WHOLE. OTHER STUDIES CONFIRMING THIS PARTICULAR POINT MAY BE FOUND IN THE LITERATURE.

HUNT HAS INVESTIGATED THE RELATIONSHIP BETWEEN DIAGNOSTIC CATEGORY AND TYPE OF SUBSEQUENT BEHAVIOR IN AN EFFORT TO DETERMINE NOT ONLY THE AMOUNT, BUT ALSO THE TYPE OF MALADAPTIVE BEHAVIOR THAT IS LIKELY TO OCCUR WITH DIFFERENT PERSONALITY TYPE GROUPS (19-20). AS A RESULT OF TWO SUCH STUDIES IN WHICH

HEALTH AND SERVICE RECORDS FOR VARIOUS GROUPS WERE COMPARED, HE CONCLUDED THAT THERE MAY BE SOME PREDICTIVE VALUE IN FAMILIAR DIAGNOSTIC CATEGORIES. RESULTS SHOWED THAT NEUROTICS WERE MORE OF A MEDICAL PROBLEM BUT LESS OF A DISCIPLINE PROBLEM THAN NORMALS. DISCIPLINARY PROBLEMS DUE TO ALCOHOLIC MISUSE WERE COMPARATIVELY HIGH AMONG NEUROTICS, SLIGHT AMONG THOSE WITH LOW INTELLIGENCE, AND NON-EXISTENT WITH SCHIZOID PERSONALITIES. THE LESS INTELLIGENT SUBJECTS HAD A GREATER INCIDENCE OF INSUBORDINATION AND LEAVE INFRACTIONS. ASOCIAL PSYCHOPATHS WERE BY FAR THE GREATEST DISCIPLINARY PROBLEMS AND WERE PARTICULARLY CHARACTERIZED BY INSUBORDINATION.

THE RELATIONSHIP BETWEEN ILLITERACY AND THE PREDICTION OF MILITARY ADJUSTMENT HAS ALSO BEEN INVESTIGATED BY HUNT (16) IN A FOLLOW-UP STUDY OF 1,413 ILLITERATES IN THE NAVY'S ILLITERACY PROGRAM. SINCE THESE MEN HAD UNDERGONE THREE SEPARATE PSYCHIATRIC SCREENINGS, THE MALADJUSTED HAD PRESUMABLY BEEN THOROUGHLY SCREENED OUT. IN SPITE OF THIS, HOWEVER, THE SUBSEQUENT NEUROPSYCHIATRIC ATTRITION RATES FOR THESE MEN WERE 12% DURING TRAINING AND 3.2% AFTER ONE YEAR. BOTH OF THESE FIGURES WERE SIGNIFICANTLY HIGHER THAN THE RATES FOR TOTAL NAVY PERSONNEL DURING THE SAME PERIODS. HUNT CONCLUDED FROM THIS THAT ILLITERACY MAY BE CONSIDERED SYMPTOMATIC NOT ONLY OF MENTAL DEFICIENCY BUT OF NEUROPSYCHIATRIC DISORDERS AS WELL. ALSO, ILLITERACY IS A HANDICAP WHICH HINDERS A PERSON'S ADJUSTMENT TO LIFE, RENDERING HIM MORE SUSCEPTIBLE TO PERSONALITY MALADJUSTMENT.

ANOTHER FACTOR WHICH INCREASES THE LIKELIHOOD OF MALADAPTATION IN SERVICE LIFE WHICH IS MORE BASIC THAN ILLITERACY IS MENTAL DEFICIENCY. IN A STUDY OF TWO GROUPS OF 597 NAVAL RECRUITS WITH LOW INTELLIGENCE (MA'S OF 12 YEARS, 6 MONTHS OR BELOW), HUNT (21) FOUND THE NEUROPSYCHIATRIC ATTRITION RATE FOR THE GROUP SHOWING ONLY LOW INTELLIGENCE TO BE 7.7%. FOR THE GROUP IN WHICH

PSYCHIATRIC SYMPTOMS APPEARED IN ADDITION TO LOW INTELLIGENCE THE DISCHARGE RATE WAS 11.3. THE COMPARABLE FIGURE FOR THE NORMAL CONTROL GROUP WAS 1.6. ACCORDING TO HUNT, THESE RESULTS SHOW CLEARLY THAT THE MILITARY POTENTIAL OF INDIVIDUALS WITH LOW INTELLIGENCE IS MUCH LESS THAN THAT OF INDIVIDUALS WHO ARE NOT SO HANDICAPPED.

IN A STUDY OF THE PREDICTION VALIDITY OF THE CORNELL SELECTEE INDEX, A PERSONALITY INVENTORY CONSISTING OF A LIST OF QUESTIONS ON NEUROPSYCHIATRIC AND PSYCHOSOMATIC SYMPTOMS, WEINSTOCK AND WATSON (30) CONCLUDE THAT THE TOTAL SCORE OF THE INDEX CONTRIBUTED VERY LITTLE TO THE IDENTIFICATION OF THE MEN LATER DISCHARGED AT A NAVAL TRAINING CENTER FOR NEUROPSYCHIATRIC REASONS. DURING AN INITIAL SCREENING PROCESS, 164 NAVAL RECRUITS WERE IDENTIFIED AS POTENTIALLY UNFIT ON THE BASIS OF THEIR RESPONSES ON THE INDEX. SEVENTY-THREE OF THESE RECRUITS WERE LISTED AS POTENTIALLY UNFIT BY PSYCHIATRIC INTERVIEWS. AT THE END OF A PROBATIONAL TRAINING PERIOD, 40% (N=30) OF THE 73 RECRUITS HAD BEEN DISCHARGED AS UNFIT. OF 91 RECRUITS IDENTIFIED AS UNFIT BY THE QUESTIONNAIRE BUT NOT BY THE INTERVIEWERS, ONLY 9% (N=8) HAD BEEN DISCHARGED DURING TRAINING AS UNFIT. OF 48 RECRUITS IDENTIFIED BY THE INTERVIEWERS BUT NOT BY THE INDEX AS POTENTIALLY UNFIT, 29% (N=14) HAD BEEN DISCHARGED.

BENTON ET AL (7) STUDIED THE SCREENING EFFICACY OF THE ENLISTED PERSONAL INVENTORY (SHIPLEY) USING SUBSEQUENT NEUROPSYCHIATRIC, ORGANIC MEDICAL, AND DISCIPLINARY ATTRITION AS CRITERIA. WITH A SAMPLE OF 2,164 RECRUITS THE SHIPLEY MEAN SCORE SUCCESSFULLY DIFFERENTIATED THE FIRST TWO OF THESE CRITERIA. THE MEAN SCORE WAS 3.3 FOR THE GROUP COMPLETING TRAINING (AFTER SIX MONTHS), 6.5 FOR THE NEUROPSYCHIATRIC DISCHARGE GROUP, 5.6 FOR THE ORGANIC MEDICAL DISCHARGE GROUP, AND 3.5 FOR THE DISCIPLINARY DISCHARGE GROUP. THE LAST FIGURE

IS BASED ON A COMPARATIVELY SMALL NUMBER OF CASES (N=8). THERE WERE 66 SUBJECTS IN BOTH THE NEUROPSYCHIATRIC AND ORGANIC MEDICAL GROUPS.

POSITIVE BUT LOW RELATIONSHIPS BETWEEN SCREENING EVALUATION AND SUBSEQUENT SERVICE CRITERIA INVOLVING ADJUSTMENT FACTORS WERE FOUND BY MACKIE ET AL (23) IN A STUDY OF 106 SUBMARINER CANDIDATES. THESE MEN HAD BEEN ASSESSED ON THE FOLLOWING EIGHT PERSONAL CHARACTERISTICS AS A RESULT OF TESTS, INTERVIEWS, AND PERSONAL HISTORY INFORMATION:

PERSONAL ADJUSTMENT	ADJUSTMENT TO NAVY LIFE
DRIVE	INTEREST IN SUBMARINES
MATURITY	APTITUDE FOR SUBMARINES
INTELLIGENCE	MRL ASSESSMENT - A SUMMARY EVALUATION

ALTHOUGH SEVERAL CRITERIA WERE USED IN THIS VALIDATION STUDY, ONLY TWO ARE PERTINENT TO THE PRESENT DISCUSSION. ONE OF THESE WAS THE SCORE FROM A GENERAL TRAIT RATING SCALE WHICH WAS FILLED OUT BY EACH SUBJECT'S IMMEDIATE SUPERIOR ON THE JOB. THIS RATING SCALE MEASURED BOTH TECHNICAL AND ADJUSTMENT-ATTITUDINAL TYPE TRAITS. SUB-CRITERIA DETERMINED FROM THE SCALE WERE: TECHNICAL COMPETENCE, RESPONSIBILITY, MOTIVATION, POISE, AND DESIRABILITY AS A SHIPMATE. THE OTHER CRITERION WAS A MORE OBJECTIVE MEASURE OF SHIPBOARD BEHAVIOR; THE NUMBER OF DISCIPLINARY ACTIONS ON RECORD.

RESULTS OF THE STUDY SHOWED SCREENING ASSESSMENTS TO BE RELATED TO THE RATING SCALE TRAITS TECHNICAL COMPETENCE AND POISE AT THE 1% LEVEL OF CONFIDENCE, AND TO RESPONSIBILITY AND DESIRABILITY AS A SHIPMENT AT THE 5% LEVEL OF CONFIDENCE. THE CORRELATION BETWEEN ASSESSMENT AND RATING SCALE TOTAL SCORE WAS SIGNIFICANT AT THE 5% LEVEL. NO SIGNIFICANT CORRELATION WAS FOUND BETWEEN ASSESSMENT AND NUMBER OF DISCIPLINARY ACTIONS.

USING ESSENTIALLY THE SAME CRITERIA AS ABOVE, MACKIE ET AL (22) STUDIED THE VALIDITY OF PREDICTING SUBSEQUENT PERFORMANCE ABOARD SUBMARINES FROM THE RESPONSES ON A PERSONAL HISTORY FORM. THE PARTICULAR INSTRUMENT USED, THE MEDICAL RESEARCH LABORATORY PERSONAL HISTORY FORM (REVISED 2-52), WAS ONE OF A BATTERY OF INSTRUMENTS USED IN THE ASSESSMENT OF PROSPECTIVE SUBMARINE PERSONNEL. IT CONSISTED OF 61 QUESTIONS OF THE "OPEN END" VARIETY. AN ITEM ANALYSIS OF 52 OF THESE QUESTIONS ON A SAMPLE OF 168 MEN SHOWED THAT THE NUMBER OF ITEMS HAVING VALIDITIES FOR ANY OF THE CRITERIA WAS NO GREATER THAN MIGHT BE EXPECTED BY CHANCE. WITH A REVISED FORM CONSISTING MAINLY OF MULTIPLE-CHOICE TYPE QUESTIONS THREE DIFFERENT SCORING KEYS WERE DEVELOPED. IN ALL THREE CASES, CORRELATING SCORES DERIVED FROM THESE KEYS WITH CRITERION SCORES YIELDED SIGNIFICANT VALIDITY COEFFICIENTS. SINCE THIS WAS A CIRCULAR PROCESS AT BEST, CROSS-VALIDATION PROCEDURES WERE RECOGNIZED AS NECESSARY FOR CONCLUSIVE RESULTS. HOWEVER, CROSS-VALIDATION WAS NOT EMPLOYED.

USING ADJUSTMENT-TYPE CRITERIA, DANIELSON AND CLARK (8) HAVE REPORTED SUCCESSFUL RESULTS IN AN EXPERIMENT ON THE EFFECTIVENESS OF PREDICTION OF A PERSONALITY INVENTORY USED IN ARMY INDUCTION SCREENING. THE FORT ORD INVENTORY WAS GIVEN TO A GROUP OF INDUCTEES BEFORE THEY ENTERED BASIC TRAINING. VALIDITY DATA WERE AVAILABLE ON THE FOUR SCALES COMPRISING THE TEST: DELINQUENCY, NEUROTIC, FAKE BAD (MALINGERING TENDENCIES), AND FEMININITY. AT THE END OF BASIC TRAINING, THE MEAN SCORES OF THE FOLLOWING CRITERION GROUPS WERE COMPARED: SEVERELY EMOTIONALLY DISTURBED - DISCHARGED (N-89); MODERATELY DISTURBED - NOT DISCHARGED (N-53); MILDLY EMOTIONALLY DISTURBED - NOT DISCHARGED (N-37); AWOL RECIDIVISTS (N-38); NORMALS (N-415); AND LEADERS (N-87). USING THE NORMALS AS THE BASE THE FOUR SCALES SIGNIFICANTLY DIFFERENTIATED EXCEPTIONAL RECRUITS, EMOTIONALLY DISTURBED RECRUITS AND AWOL RECRUITS. THE TEST DETECTED MORE THAN

50% OF THE SEVERELY EMOTIONALLY DISTURBED GROUP. THE FAKE BAD SCALE WAS THE MOST EFFECTIVE PART OF THE TEST. THE AUTHOR SUGGESTS IMMATURE REACTION AS A FIFTH CATEGORY BEARING INVESTIGATION.

CROSS-VALIDATION STUDIES

IN ANY STUDY DEALING WITH PREDICTION IT IS ESSENTIAL THAT THE VALIDITY OF PREDICTORS BE DEMONSTRATED ON A SIMILAR, BUT INDEPENDENT SAMPLE FROM THE ONE ON WHICH THE SCORING KEYS FOR THE PREDICTORS WERE ORIGINALLY DEVELOPED. PSYCHIATRIC PREDICTION STUDIES UTILIZING SUCH A DESIGN MAY BE FOUND PRIMARILY IN THE MOST RECENT LITERATURE.

THE MOST AMBITIOUS PSYCHIATRIC SELECTION PROGRAM UTILIZING CROSS-VALIDATION TECHNIQUES IS THAT DESIGNED BY SELLS (25). THIS IS AN AIR FORCE PROGRAM WHICH HAS AS ITS OBJECTIVE, THE PREDICTION OF THE BEHAVIOR OF MEN UNDER COMBAT. THE CRITERIA USED, ALTHOUGH NECESSARILY INTERMEDIATE ONES, ARE PSYCHIATRICALY BASED MEASURES OF ADJUSTMENT DEVELOPED AT A LATER DATE IN TRAINING. IN ORDER TO SIMULATE EXPERIMENTALLY CONDITIONS OF COMBAT, STRESSFUL SITUATIONS IN TESTING ARE BEING EMPHASIZED AS PREDICTOR INSTRUMENTS.

PROGNOSTIC SCREENING HYPOTHESES DEVELOPED BY SELLS AFTER AN EXTENSIVE REVIEW OF THE LITERATURE ON THE SUBJECT INVOLVE THE MEASUREMENT OF THE FOLLOWING CRITICAL VARIABLES:

MOTIVATION

REALISTIC

SINCERE DESIRE TO FLY
SINCERE INTEREST IN MILITARY CAREER
ACCEPTS COMBAT
APPROPRIATE PERSONAL IDEOLOGICAL
AND VOCATIONAL INTERESTS
STRONG DRIVE

UNREALISTIC

ROMANTIC DESIRE
ROMANTIC INTEREST
REJECTS COMBAT
INAPPROPRIATE INTERESTS
MEDIocre DRIVE

PERSONALITY DYNAMICSREALISTIC

MATURE ADJUSTMENT TO CIVILIAN LIFE
 EMOTIONALLY STABLE
 STRONG CHARACTER STRUCTURE
 HIGH THRESHOLD FOR STRESS AND ANXIETY

UNREALISTIC

IMMATURE ADJUSTMENT
 EMOTIONALLY UNSTABLE
 WEAK STRUCTURE
 LOW THRESHOLD

THE TYPES OF INSTRUMENTS USED TO MEASURE THESE VARIABLES ARE HIGHLY DIVERSIFIED IN NATURE, REPRESENTING A COMPLETE RANGE OF PERSONALITY ASSESSMENT TECHNIQUES. IN ALL CASES THEY ARE FIRST VALIDATED AND THEN CROSS-VALIDATED AGAINST A PSYCHIATRICALLY BASED CRITERION. ONLY AFTER THIS RIGOROUS TEST ARE THEIR RELATIVE PREDICTOR QUALITIES CONSIDERED.

IN ORDER TO MAXIMIZE ADJUSTMENT FACTORS AND MINIMIZE ABILITY OR APTITUDE FACTORS IN THE CRITERION, THE VALIDATING SAMPLES OF PASS AND FAIL CADETS WERE SELECTED ON THE FOLLOWING CONDITIONS. THE "PASS" GROUP CONSISTED OF CADETS WHO:

1. HAD PASSED THE FLIGHT TRAINING PROGRAM AND HAD
 BEEN COMMISSIONED
2. HAD A RATING OF "WELL ADJUSTED"
3. HAD APTITUDE SCORES OF STANINE SIX OR HIGHER

THE "FAIL" GROUP CONSISTED OF CADETS WHO:

1. HAD FAILED THE TRAINING PROGRAM AS A RESULT OF
 INADEQUATE ADJUSTMENT, BUT
2. HAD ALSO RECEIVED PILOT APTITUDE STANINE SCORES
 OF SIX OR HIGHER.

USING THE EXPERIMENTAL RATIONALE OUTLINED ABOVE, SELLS ET AL (26) ADMINISTERED A GROUP INKBLOT TEST TO 2,000 STUDENTS IN BASIC PILOT TRAINING. A PROVISIONAL SIGN KEY WAS DEVELOPED FROM THE RESPONSES OF AN EXPERIMENTAL SAMPLE OF 50 WELL ADJUSTED-PASS AND 50 MALADJUSTED-FAIL CADETS. THIS KEY SIGNIFICANTLY

DISCRIMINATED BETWEEN THE PASS AND FAIL MEMBERS OF A SECOND SAMPLE SELECTED TO MATCH THE FIRST. SCORES FROM A REVISED KEY CORRELATED .46 WITH THE CRITERION. THE CORRELATION OF PILOT STANINE WITH PASS-FAIL WAS RAISED FROM .38 TO .57 WHEN COMBINED WITH PLUS SCORES ALONE.

IN ANOTHER STUDY OF THIS PROGRAM DEALING WITH THE PREDICTIVE VALIDITY OF A SENTENCE COMPLETION TEST, TRITES ET AL (29) ADMINISTERED THE TEST TO 2,185 STUDENTS IN BASIC TRAINING. A RANK-RATIO SCORING KEY WAS THEN DEVELOPED ON AN EXPERIMENTAL SAMPLE OF 50 WELL ADJUSTED-PASS AND 50 MALADJUSTED-FAIL CADETS. THE RELATIONSHIP BETWEEN THESE SCORES FROM THIS KEY AND THE CRITERION WAS LOW BUT STATISTICALLY SIGNIFICANT FOR FOUR CROSS-VALIDATION SAMPLES.

FACTORS MEASURED BY THE SENTENCE COMPLETION TEST WERE ATTITUDE TOWARD:

SELF	FAMILY
AIR FORCE	SEX
FLYING	SOCIAL INSTITUTIONS
COMBAT	INTERPERSONAL RELATIONS

ACCORDING TO THE AUTHORS, THE RANK-RATIO SCORING KEY DEVELOPED IN THE STUDY APPEARED TO MEASURE ATTITUDE PATTERN, IN WHICH DISCRIMINATION OF THE CRITERION WAS BASED ON EXPRESSIONS OF ATTITUDES OF SOCIAL CONFORMITY, SELF-ESTEEM, MOTIVATION TOWARD THE AIR FORCE, AND A SPECIAL TYPE OF ORDERED GREGARIOUSNESS. THEY RELATE THE KEY TO THE MOTIVATIONAL ASPECT OF THE CRITERION, WHICH IS RESPONSIBLE FOR A SMALL BUT DISCRETE PART OF THE TOTAL VARIANCE TO BE PREDICTED.

IN RESEARCH ON THE CORNELL INDEX, UNDER THE SAME PROGRAM, BARRY AND RAYNOR (4) ADMINISTERED THE TEST TO AN ORIGINAL POPULATION OF 1,033 CADETS. FROM THIS NUMBER AN EXPERIMENTAL POPULATION WAS CHOSEN CONSISTING OF 150 CADETS ON WHOM CRITERIA OF ADJUSTMENT AND OF SUCCESS IN TRAINING WERE AVAILABLE. SEVERAL CORNELL INDEX KEYS WERE THEN DEVELOPED TO PREDICT THESE CRITERIA. THE FOLLOWING RESULTS ARE REPORTED:

THE TEST AUTHORS' KEY FOR UNHEALTHY RESPONSES WITH TWO SLIGHT MODIFICATIONS WAS FOUND TO BE THE MOST USEFUL OF THE KEYS TESTED. IN A VALIDATION SAMPLE DRAWN TO MATCH THE EXPERIMENTAL SAMPLE, 8% (N=12) OF THE CADETS WOULD BE SCREENED AS UNFIT IF A CUTTING POINT BETWEEN EIGHT AND NINE WERE EMPLOYED. PREDICTION WOULD BE CORRECT IN 75% (N=9) OF THESE CASES IF THIS TEST ALONE WERE USED FOR SCREENING.

IN THE TOTAL POPULATION OF 1,033 CADETS, A STATISTICALLY SIGNIFICANT CURVILINEAR RELATIONSHIP WAS FOUND BETWEEN THE CRITERIA AND THE NUMBER OF UNHEALTHY RESPONSES GIVEN. WITH THE MOST EFFICIENT CUTTING POINT (BETWEEN 8 AND 9), OVER 8% (N=87) OF THE CADETS COULD BE IDENTIFIED AS UNFIT IF THIS TEST WERE USED ALONE FOR SCREENING. PREDICTION WOULD BE CORRECT IN OVER 74% OF THESE CASES. OTHER CUTTING POINTS RANGING FROM FIVE TO NINE WOULD ALLOW SIGNIFICANT BUT LESS EFFICIENT DISCRIMINATION BETWEEN THE CRITERION GROUPS.

MOTIVATIONAL, EMOTIONAL, AND PHYSICAL FAILURES WERE MORE SUCCESSFULLY IDENTIFIED THAN APTITUDE FAILURES.

IN A FOURTH STUDY UNDER THE AIR FORCE PROGRAM, THE HUMAN FIGURE DRAWING TEST (210 DESCRIPTIVE ITEMS) WAS ITEM ANALYSED BY ANASTASI AND FOLEY (2) ON 50 WELL ADJUSTED-PASS AND 50 MALADJUSTED-FAIL CADETS. CROSS-VALIDATION ON A SIMILARLY SELECTED SAMPLING FAILED TO DISCRIMINATE SIGNIFICANTLY. FOUR CLINICAL PSYCHOLOGISTS CLASSIFIED 125 DRAWINGS AS IN THE UPPER OR LOWER CRITERION GROUPS. RESULTS INDICATED LACK OF VALIDITY OF THESE CLINICAL JUDGMENTS.

ANASTASI ET AL (3) THEN STUDIED THE PREDICTIVE VALIDITY OF A SELF-DESCRIPTIVE TEST BASED ON SELF CONCEPTS AND SELF RATINGS. APPROXIMATELY 100 INDIVIDUAL SCORING ELEMENTS WERE DEVELOPED AND APPLIED TO THE SELF DESCRIPTION TESTS OF 50 UPPER AND 50 LOWER CRITERION CASES CHOSEN ON THE SAME BASIS AS IN THE EARLIER STUDIES. THESE SCORING ELEMENTS COVERED BOTH CONTENT AND FORMAL FEATURES OF THE TEST RESPONSES. ALL THOSE THAT DISCRIMINATED BETWEEN UPPER AND LOWER CRITERION GROUPS AT THE .10 LEVEL WERE COMBINED INTO A PRELIMINARY SCORING KEY. CROSS-VALIDATION OF THIS SCORING KEY IN A SIMILAR SAMPLE OF 100 PILOT CADETS YIELDED MARGINAL BUT PROMISING EVIDENCE OF VALIDITY. THE SIGNIFICANCE OF THE MEAN DIFFERENCE BETWEEN UPPER AND LOWER CROSS-VALIDATION GROUPS WAS BETWEEN THE .02 AND THE .05 LEVELS.

A CONTROLLED WORD ASSOCIATION TEST, THE CORNELL WORD FORM, WAS ALSO INCLUDED IN THE EXPERIMENTAL TESTS ADMINISTERED TO CADETS ACTING AS SUBJECTS FOR THE AIR FORCE PROGRAM. SCORING KEYS WERE DEVELOPED BY BARRY ET AL (5) ON AN EXPERIMENTAL SAMPLE OF 132 CADETS AND VALIDATED WITH DATA FROM AN ADDITIONAL MATCHED SAMPLE. A KEY BASED ON 12 UNHEALTHY RESPONSES WAS CROSS-VALIDATED ON THREE SAMPLES. IN EACH CASE, USING A CUT-OFF POINT BETWEEN TWO AND THREE, THIS KEY SUCCESSFULLY DIFFERENTIATED UPPER AND LOWER CRITERION GROUPS. THE AUTHORS CONCLUDE THAT THE CORNELL WORD FORM WOULD BE A USEFUL PART OF A PSYCHIATRIC SCREENING BATTERY. THEY ALSO SUGGEST THAT SINCE LOW CRITERION GROUPS FREELY EXPRESSED CERTAIN FEARS, DISSATISFACTIONS, AND PSYCHOSOMATIC SYMPTOMS, STRAIGHT-FORWARD UNDISGUISED QUESTIONS WOULD BE USEFUL IN SCREENING A SMALL BUT SIGNIFICANT NUMBER OF POTENTIAL EMOTIONAL AND MOTIVATIONAL FAILURES IN TRAINING.

TRITES (28) INVESTIGATED THE PREDICTIVE VALUE OF THE PERSONAL INVENTORY (SHIPLEY), ANOTHER EXPERIMENTAL TEST IN THE BATTERY DEVELOPED IN THE AIR FORCE RESEARCH. WITH A 12-ITEM SCORING KEY DEVELOPED IN AN EXPERIMENTAL SAMPLE OF

46 PAIRS OF WELL ADJUSTED-PASS AND MALADJUSTED-FAIL CADETS, THE TEST SIGNIFICANTLY DIFFERENTIATED CRITERION GROUPS IN TWO INDEPENDENT VALIDATION SAMPLES. ALTHOUGH THE KEY WAS PARTIALLY RELATED TO FACTORS ALREADY BEING PREDICTED BY PILOT STANINE, THE AUTHOR CONCLUDED THAT IT DID MAKE A SIGNIFICANT CONTRIBUTION TO PREDICTION INDEPENDENT OF STANINE.

THERE ARE OTHER STUDIES INCLUDED IN THE AIR FORCE SCREENING RESEARCH PROGRAM WHICH ARE NOT DIRECTLY RELATED TO THE PARTICULAR OBJECTIVES OF THIS LITERATURE SEARCH. THESE DEAL SPECIFICALLY WITH ANXIETY PRONENESS AND COMBAT EFFECTIVENESS. AS ALREADY NOTED, THE CURRENT PROBLEM IS CONCERNED MORE WITH PSYCHOLOGICAL ADAPTABILITY UNDER ORDINARY OPERATIONAL CONDITIONS. A FURTHER REVIEW OF SUCH STUDIES FOLLOWS.

WORKING WITH AN EXPERIMENTAL ATTITUDE SURVEY, FRENCH AND YARNOLD (12) FOUND A POSITIVE RELATIONSHIP BETWEEN ATTITUDES TOWARD VARIOUS ASPECTS OF AIR FORCE LIFE AND SUBSEQUENT NEUROPSYCHIATRIC BREAK. THE 32-ITEM INVENTORY WAS PART OF A BATTERY OF TESTS GIVEN TO PILOT CANDIDATES ON THEIR ENTRANCE INTO FLIGHT TRAINING. AT A LATER STAGE OF TRAINING, 179 CANDIDATES WHO HAD BEEN ADMITTED TO THE NEUROPSYCHIATRIC SECTION OF AN AIR FORCE HOSPITAL, AND 179 NORMAL CONTROLS MATCHED ON AS MANY PERTINENT BIOGRAPHICAL VARIABLES AS POSSIBLE (E.G., RACE, FLIGHT, DATE OF INDUCTION) WERE COMPARED WITH RESPECT TO THEIR ATTITUDE SURVEY SCORES. A STANDARD SCORING KEY SIGNIFICANTLY DIFFERENTIATED THE TWO GROUPS.

THE GROUPS WERE THEN SPLIT UP INTO AN EXPERIMENTAL (N=100 PAIRS) AND A CROSS-VALIDATION (N=79 PAIRS) SAMPLE. A NEUROPSYCHIATRIC SCALE WAS DEVELOPED ON THE FIRST SAMPLE BY TAKING THOSE ITEMS WITH SIGNIFICANT PHI'S AGAINST THE NEUROPSYCHIATRIC-NORMAL DICHOTOMY. WHEN VALIDATED AGAINST THE SECOND SAMPLE, THE NEUROPSYCHIATRIC KEY SIGNIFICANTLY DIFFERENTIATED THE CRITERION GROUPS AT

A HIGHER LEVEL OF CONFIDENCE THAN THE STANDARD KEY. THE SAME RESULT WAS FOUND WITH A SECOND CROSS-VALIDATION SAMPLE CONSISTING OF 36 PAIRS OF SUBJECTS. ALSO, WITH CERTAIN CUT-OFF POINTS ON THE NEW NEUROPSYCHIATRIC SCALE, IT WAS POSSIBLE TO IDENTIFY SUCCESSFULLY A SUBSTANTIAL PORTION OF THE NEUROPSYCHIATRIC CASES.

CHAPTER III

DEVELOPMENT OF THE MULTIPLE FACTOR
FORCED CHOICE PERSONALITY INVENTORY

FROM THE REVIEW OF THE LITERATURE PRESENTED IN CHAPTER II, IT CAN BE SEEN THAT FEW STUDIES RELATE DIRECTLY TO THE PROBLEM OF PREDICTING LATER NAVY ADJUSTMENT FROM DATA OBTAINED AT THE TIME OF RECRUIT PSYCHIATRIC SCREENING. MOST OF THE RESEARCH STUDIES UTILIZE CRITERIA SUCH AS PASS-FAIL, EXAMINATION OF RECORDS, PSYCHIATRIC EVALUATIONS, OR PERFORMANCE MEASURES, WHICH ARE ONLY marginally RELATED TO PERSONALITY AND ADJUSTMENT.

FROM THE LITERATURE SURVEY, IT ALSO SEEMS THAT MOST OF THE EFFORT IN PREDICTOR DEVELOPMENT IS BEING DEVOTED TO PERSONALITY MEASUREMENTS. IT SHOULD BE NOTED THAT ONE OF THE REASONS FOR THE FAILURE OF THE PERSONALITY QUESTIONNAIRE CONTAINED IN THE MEDICAL SCREENING FORM A TO RELATE TO THE ADJUSTMENT CRITERIA IS THAT THE NUMBER OF UNFAVORABLE RESPONSES WHICH RECRUITS GAVE WAS TOO LOW TO BE OF ANY PREDICTIVE VALUE. IT SEEMS REASONABLE THAT IF A MAN IS TRYING TO GET INTO THE NAVY, THE CHANCES ARE HE WILL NOT RESPOND POSITIVELY TO QUESTIONS ABOUT HIS BEHAVIOR OR PERSONALITY WHICH APPEAR TO HAVE A NEGATIVE AFFECT VALUE; HE IS MOTIVATED TO PLACE HIMSELF IN A FAVORABLE LIGHT. THIS CONCLUSION HAS BEEN VERIFIED BY OTHER INVESTIGATORS (6). IF, THEREFORE, A METHOD COULD BE DEVISED TO GET MEN TO RESPOND MORE REALISTICALLY TO PERSONALITY INVENTORY QUESTIONS, IT IS MORE LIKELY THAT THESE RESPONSES WOULD PREDICT LATER ADJUSTMENT BETTER. THIS STUDY APPROACHED THE PROBLEM OF PERSONALITY MEASUREMENT FROM THAT VIEWPOINT.

A REVIEW OF PERSONALITY FACTOR STUDIES

FRENCH (13) IN 1953, REPORTED AN ANALYSIS OF THE RESEARCH ON THE FACTOR ANALYTIC APPROACH TO THE PSYCHOLOGY OF PERSONALITY. HE REVIEWED THE MAJOR FACTOR ANALYTIC RESEARCH STUDIES IN PERSONALITY AND COMBINED ANALYSES TO ARRIVE AT A COMPREHENSIVE PICTURE OF PERSONALITY FACTORS. THE REPORT IS IN TWO MAJOR PARTS. THE FIRST PART DISCUSSES EACH FACTOR STUDY INCLUDING VARIABLE DESCRIPTIONS, FACTOR LOADINGS, AND OTHER INFORMATION. ANALYSES WERE LIMITED TO STUDIES OF PERSONALITY AND INTEREST MEASUREMENTS; STUDIES WHERE REFERENCE FACTORS WERE EXTRACTED AND WHEN THERE WAS ROTATION TO SIMPLE STRUCTURE; STUDIES USING ONLY R-TECHNIQUES. THE SECOND PART COMBINES ANALYSES TO FORM A SET OF FACTORS EACH OF WHICH IS SUBSTANTIATED BY SEVERAL STUDIES. IN THIS PART, A FACTOR IS PRESENTED, THE ANALYSES USED TO SUBSTANTIATE IT ARE PRESENTED, IT IS DEFINED AND DESCRIBED, AND THE TESTS WITH HIGH LOADINGS ON EACH FACTOR ARE LISTED. FOR ALL MEANINGFUL FACTORS, NAMES WERE CHOSEN TO FIT THEIR INTERPRETATION AS CLOSELY AS POSSIBLE. FRENCH DESCRIBES A TOTAL OF 49 FACTORS WHICH WERE IDENTIFIED IN MORE THAN ONE ANALYSIS.

THIS STUDY APPEARS TO BRING TOGETHER INTO ONE REFERENCE SOURCE THE BEST FACTOR ANALYTIC STUDIES IN PERSONALITY MEASUREMENT. IT SHOULD BE POINTED OUT THAT THESE FACTORS ARE NOT CONSIDERED BY FRENCH TO BE THE FINAL WORD IN FACTOR ANALYTIC PERSONALITY MEASUREMENT. THEY DO CONSTITUTE, HOWEVER, A COLLATION OF THE MAJOR PERSONALITY FACTOR ANALYSES INTO A MEANINGFUL FORM. IT WOULD SEEM THAT IF A PERSONALITY INVENTORY UTILIZING SOURCE MATERIAL (VARIABLES) FROM EACH OF FRENCH'S FACTORS COULD BE CONSTRUCTED, THE MAJOR DIMENSIONS OF PERSONALITY WOULD BE MEASURED RELATIVELY THOROUGHLY.

THEORY OF THE PERSONALITY INVENTORY

EVEN THOUGH AN EXHAUSTIVE LIST OF PERSONALITY QUESTIONS MIGHT BE COMPILED EACH OF WHICH REFLECTED SOME FACTOR, AND THESE WERE ADMINISTERED TO A SAMPLE OF PEOPLE, THERE IS STILL NO ASSURANCE THAT NAVY RECRUITS WOULD RESPOND IN A MANNER WHICH WOULD ENABLE US TO OBTAIN DIFFERENTIAL MEASUREMENTS ON THESE FACTORS. IN THE NAVY RECRUITING SITUATION WHERE AN INDIVIDUAL IS MOTIVATED BY HIS DESIRE TO GET INTO THE NAVY, HE WILL STILL, WE FEEL, RESPOND IN A MANNER WHICH HE BELIEVES TO BE ACCEPTABLE TO THOSE WHO ARE DOING THE SCREENING. THIS MEANS THAT ANY SO-CALLED PERSONALITY STATEMENT HAS FOR ANY PERSON OR GROUP, AN AFFECTIVE OR FAVORABILITY VALUE ON A CONTINUUM FROM FAVORABLE TO UNFAVORABLE.

THE THEORY OF THE PERSONALITY INVENTORY DEVELOPED IN THIS STUDY INVOLVES HAVING SUBJECTS CHOOSE FROM AMONG A NUMBER OF PERSONALITY STATEMENTS OF EQUAL AFFECTIVE VALUE, THOSE WHICH MOST AND LEAST DESCRIBE HIM. IF STATEMENTS HAVE EQUAL AFFECTIVE VALUE, THOSE CHOSEN AS MOST AND LEAST DESCRIPTIVE OF THE INDIVIDUAL SHOULD REFLECT HIS PERCEPTION OF HIS OWN PERSONALITY. IF EACH OF THESE STATEMENTS IN THE GROUP REFLECTS DIFFERENT PERSONALITY FACTORS, MEASURES CAN BE OBTAINED ON THE FACTORS. IF THIS RESULTS IN A RANGE OF RESPONSES FOR EACH PERSON FOR EACH FACTOR, FACTOR SCORES CAN THEN BE STATISTICALLY RELATED TO CRITERIA. AS WE HAVE POINTED OUT, BECAUSE OF A RESTRICTED RANGE OF RESPONSES, THIS COULD NOT BE DONE IN A FREE RESPONSE SITUATION WHERE NAVY RECRUITS SIMPLY REPLIED YES OR NO TO A STATEMENT WITH OBVIOUS AFFECTIVE VALUE.

DEVELOPMENT OF THE INVENTORY

THIS SECTION DESCRIBES HOW THE MULTIPLE FACTOR FORCED CHOICE (MFFC) PERSONALITY INVENTORY WAS CONSTRUCTED IN TERMS OF DEVELOPMENT OF FACTORS, DEVELOPMENT OF ITEMS, AND DEVELOPMENT OF TRIADS FOR THE FINAL FORM OF THE INVENTORY.

DEVELOPMENT OF FACTORS

FRENCH'S MATERIAL WAS USED EXCLUSIVELY IN THE DEVELOPMENT OF FACTORS FOR THIS INVENTORY. ALTHOUGH HE ISOLATED 49 FACTORS IN HIS STUDY, NOT ALL OF THEM COULD BE USED FOR OUR PURPOSES FOR THE FOLLOWING REASONS:

- A. SOME OF THE FACTORS COULD NOT BE MEASURED IN THE TYPE OF INVENTORY WE WANTED TO DEVISE. FOR EXAMPLE: FACTOR "G" - INTELLIGENCE - CAN BE MORE EFFECTIVELY MEASURED BY SCORES ON THE AFQT WHICH ARE ALREADY AVAILABLE ON RECRUITS.
- B. OTHER FACTORS WERE MEASUREABLE ONLY BY STANDARDIZED TESTS WHICH WERE TOO LENGTHY OR ADMINISTRATIVELY TOO DIFFICULT FOR THE TIME WHICH MIGHT BE AVAILABLE. FOR EXAMPLE: FACTOR "IL" - INTEREST IN LINGUISTIC ACTIVITIES - IS MEASURED EXCLUSIVELY BY SCORES ON THE STRONG VOCATIONAL INTEREST INVENTORY.
- C. OTHER FACTORS UPON CLOSER EXAMINATION, APPEARED TO HAVE CONSIDERABLE OVERLAPPING OR WERE, IN OUR OPINION, MEASURING OPPOSITE ENDS OF THE SAME CONTINUUM. IN THESE CASES, WE COMBINED TWO FACTORS. FOR EXAMPLE: FACTOR "AL" - ALERTNESS - IS DEFINED AS "LACK OF ABSENT-MINDEDNESS." FACTOR "AU" - AUTISTIC TENDENCY - IS DEFINED AS "THE HABIT OF USING REVERIE TO ESCAPE FROM AN UNPLEASANT THREATENING ENVIRONMENT." BECAUSE THERE WAS A SUBSTANTIAL AMOUNT OF SOURCE MATERIAL COMMON TO BOTH THESE FACTORS, THEY WERE COMBINED INTO ONE FACTOR - "ALAU."

D. OTHER FACTORS DID NOT HAVE ENOUGH SUBSTANTIATING SOURCE MATERIAL IN QUESTIONNAIRE FORM TO BE USABLE. FOR EXAMPLE: FACTOR "SF" - SOPHISTICATION - DID NOT CONTAIN ENOUGH ITEMS OF THIS KIND.

E. OTHER FACTORS WERE FOUND ONLY IN ABNORMALS. FOR EXAMPLE: FACTOR "Dt" - DETERIORATION. THESE WOULD NOT BE APPLICABLE IN THE NAVY RECRUIT SITUATION.

THE FINAL LIST OF 28 FACTORS IS PRESENTED BELOW.

1. A: AGREEABLENESS
READINESS TO COMPLY WITH THE DESIRES OF OTHERS AND TO INITIATE ACTIVITY THAT WILL SERVE THE DESIRES OF OTHERS THROUGH UNDERSTANDING AND TOLERATING THEIR NEEDS.
2. ALAU: ALERTNESS, AUTISTIC TENDENCY
AWARENESS OF SURROUNDINGS, LACK OF ABSENTMINDEDNESS VS. HABIT OF USING REVERIE TO ESCAPE FROM THE UNPLEASANTNESS OF AN ENVIRONMENT FELT TO BE THREATENING.
3. CD: CYCLOID TENDENCY
ALTERNATION BETWEEN NORMALCY AND DEPRESSION WITHOUT EXTERNAL REFERENCE.
4. CV: CONVENTIONALITY
FAVORABLE ATTITUDE TOWARD STRICT CONVENTIONALITY VS. ECCENTRICITY WITH ARTISTIC AND INTELLECTUAL INTERESTS.
5. DE: DEPENDABILITY
DISPOSITION TO COMPLY WITH THE REQUIREMENTS OF AUTHORITY.
6. Do: DOMINANCE
HABIT OF SPEAKING SO AS TO CAST ONESELF IN A SUPERIOR LIGHT.

7. E: EMOTIONALITY
CHRONIC EXCESSIVENESS OF EMOTIONALITY AND ITS ATTEN-
DANT SYMPTOMS OF NEUROTIC TENDENCY.
8. EI: EMOTIONAL IMMATURITY
LACK OF CONTROL OF EMOTIONAL REACTIONS WHICH RESULT
FROM FRUSTRATION.
9. FE: FEARFULNESS
SUBJECT TO CHRONIC FEAR OF DANGERS IN THE CULTURE.
10. Gs: GREGARIOUSNESS
DESIRE TO BE WITH PEOPLE OR NOT TO BE ALONE.
11. Ho: HONESTY
RESISTANCE TO THE TEMPTATION TO CHEAT ON A TEST.
12. Ia: INTEREST IN ATHLETICS
INTEREST IN ATHLETICS AS SPECTATOR OR PARTICIPANT.
13. IF: INTEREST IN FAMILY
INTEREST IN THE WELFARE OF ONE'S FAMILY AND IN ASSUM-
ING THE RESPONSIBILITIES OF HEAD OF THE FAMILY.
14. IP: INTEREST IN PHILOSOPHIZING
INTEREST IN THE CONTEMPLATION AND DISCUSSION OF THE
SERIOUS HAPPENINGS AND PROBLEMS OF LIFE.
15. Ix: INTEREST IN SEX
NEED FOR SATISFACTION OF THE SEXUAL DRIVE.
16. ME: METICULOUSNESS
TENDENCY TOWARD EXCESSIVE CAREFULNESS WITH DETAILS.
17. MF: MASCULINITY VS. FEMININITY
MASCULINE VS. FEMININE INTERESTS, PREFERENCES AND BE-
HAVIOR PATTERNS.

18. MP: IMPULSIVENESS
TENDENCY TO ACT BEFORE ADEQUATE CONSIDERATION OF THE
ACTION CAN BE MADE.
19. NE: NERVOUSNESS
EMOTIONAL HYPER-SENSITIVITY TO EXCITING, DISTRACTING,
OR SUDDEN STIMULI.
20. PC: PSYCHOTIC TENDENCY
COMBINATION FACTOR OF TENDENCY TOWARD MENTAL DISTURBANCE
OF THE SCHIZOPHRENIC, MANIC-DEPRESSIVE, AND PERHAPS OTHER
TYPES.
21. PE: PERSISTENCE
WILLINGNESS AND ABILITY TO STICK AT A TASK OR A TYPE OF WORK.
22. RELR: RELIGIOUS ATTITUDE, INTEREST IN RELIGION
ATTITUDE THAT THE CONVENTIONAL DOCTRINES OF THE CHURCH
ARE CORRECT AND SHOULD BE SUPPORTED PLUS INTEREST IN THE
SPIRITUAL VALUES AND IDEALS OF RELIGION AS THEY SATISFY
THE INDIVIDUAL'S NEED FOR SECURITY OR OTHER PERSONAL NEEDS.
23. SC: SELF CONFIDENCE
CONFIDENCE IN ONE'S OWN ABILITY TO BE GENERALLY SUCCESSFUL.
24. SE: SENSITIVE ATTITUDE
ATTITUDE FAVORABLE TOWARD SHOWING SENSITIVITY TO EMOTIONAL
QUALITY AND CONSEQUENT SYMPATHETIC UNDERSTANDING OF THE
EFFECTS OF EMOTIONAL STIMULI UPON OTHERS.
25. SN: SELF-CONSCIOUSNESS
EMBARRASSMENT IN PERFORMING OR BEING CONSPICUOUS IN FRONT
OF STRANGERS OR CROWDS.

26. So: SOCIABILITY

PARTICIPATION AND AGGRESSIVENESS IN SOCIAL ACTIVITIES.

27. Ss: SELF-SUFFICIENCY

THE ABILITY AND PREFERENCE FOR FACING INTELLECTUAL AND
EMOTIONAL PROBLEMS ALONE.

28. Su: SURGENCY

GENERAL DRIVE RESULTING IN BODILY ACTIVITY, FLUENT SPEECH
AND EUPHORIA.

DEVELOPMENT OF ITEMS

ITEMS USED TO MEASURE EACH OF THE 28 PERSONALITY FACTORS WERE DEVELOPED IN THE FOLLOWING MANNER. MUCH OF THE MATERIAL FROM FRENCH WAS USED DIRECTLY. THAT IS, TEST ITEMS WITH HIGH LOADINGS WERE DRAWN DIRECTLY FROM THE ORIGINAL MATERIAL. IN CASES WHERE THERE WERE NOT ENOUGH ITEMS TO OBTAIN A NUMBER SUFFICIENT TO MEASURE A FACTOR, ITEMS WERE CONSTRUCTED WHICH, IN CONTENT, WERE SIMILAR TO THE OTHER VARIABLES WITH HIGH LOADINGS ON THE FACTOR. IN CASES WHERE THERE WERE MORE ITEMS AVAILABLE THAN NECESSARY, A SYSTEMATIC SAMPLING OF THE ITEMS WAS MADE.

SOME OF THE ITEMS IN THESE TESTS AND INVENTORIES WERE OF A VOCABULARY OR CONCEPTUAL LEVEL TOO HIGH FOR THE POPULATION TO WHOM THEY WOULD BE ADMINISTERED. THESE ITEMS WERE THEREFORE MODIFIED BY THE RESEARCH STAFF TO INCREASE THEIR UNDERSTANDABILITY. ALL THE ITEMS WERE THEN SUBMITTED TO THE PSYCHIATRIC STAFF AT THE NAVAL TRAINING STATION, BAINBRIDGE, MARYLAND FOR FURTHER SUGGESTIONS FOR MODIFICATION. THE STAFF WAS VERY COOPERATIVE IN MAKING SUGGESTIONS ABOUT REDUCING THE DIFFICULTY OF ITEMS IN TERMS OF THEIR UNDERSTANDABILITY. MANY ITEMS WERE AGAIN MODIFIED. THE FINAL 260 ITEMS REPRESENT THE COMBINED EFFORTS OF THE RESEARCH STAFF AND THE PSYCHIATRIC STAFF AT BAINBRIDGE TO PREPARE A FORM IN WHICH EACH ITEM WOULD BE UNDERSTANDABLE TO MOST RECRUITS.

OBTAINING PREFERENCE OR AFFECTIVE VALUES FOR ITEMS. THE FINAL LIST OF 260 ITEMS WAS PUT INTO A FORM CALLED THE FAVORABILITY QUESTIONNAIRE. THE DIRECTIONS FOR THIS QUESTIONNAIRE INSTRUCTED THE RECRUIT TO RESPOND ON A FIVE POINT SCALE ABOUT THE FAVORABILITY OF EACH STATEMENT IF SOMEONE SHOULD SAY THE STATEMENT TO OR ABOUT HIM. THE QUESTIONNAIRE WAS ADMINISTERED ANONYMOUSLY. THE RECRUITS WERE INSTRUCTED NOT TO BE CONCERNED WITH THE TRUTH OR FALSITY OF EACH STATEMENT, BUT ONLY AS TO THE FAVORABILITY OF EACH STATEMENT. THIS QUESTIONNAIRE WAS ADMINISTERED TO 300 RECRUITS AT BAINBRIDGE. ILLITERATES HAD BEEN REMOVED FROM THIS GROUP ON THE BASIS OF THE NAVAL CLASSIFICATION TEST WHICH HAD BEEN ADMINISTERED ONLY A FEW HOURS BEFORE. THIRTEEN OF THE COMPLETED QUESTIONNAIRES WERE DISCARDED BECAUSE IT APPEARED UPON INSPECTION THAT (A) INSTRUCTIONS HAD BEEN MISUNDERSTOOD, OR (B) RECRUITS HAD NOT FILLED IN THE FORM CONSCIENTIOUSLY (RESPONSE PERSEVERATION).

THE AFFECTIVE VALUE OF EACH STATEMENT WAS DETERMINED BY COMPUTING THE MEAN VALUE ASSIGNED TO EACH STATEMENT BY THE GROUP OF 287.

RELIABILITY OF THE P VALUES. THE GROUP OF 287 SUBJECTS WAS ARBITRARILY DIVIDED INTO TWO GROUPS OF 143 AND 144. THE P (PREFERENCE OR AFFECTIVE) VALUE FOR EACH STATEMENT WAS COMPUTED FOR EACH GROUP. A RELIABILITY COEFFICIENT COMPUTED FOR THE ENTIRE FORM BY CORRELATING ITEM P VALUES FOR EACH GROUP. THE P VALUES RANGED FROM 1.55 TO 4.75. THE RELIABILITY OF THE ENTIRE FORM WAS .98. FROM INSPECTING THE SCATTER PLOT IT WAS CONCLUDED THAT THE P VALUE OF ANY SINGLE ITEM WAS VERY STABLE.

DEVELOPMENT OF TRIADS

HAVING OBTAINED STABLE P VALUES FOR ALL ITEMS, THE NEXT STEP WAS TO COMBINE ITEMS FROM DIFFERENT FACTORS BUT OF EQUAL AFFECTIVE VALUES INTO TRIADS.

TO DO THIS, ITEMS WERE FIRST RANKED FROM HIGH TO LOW IN TERMS OF P VALUES. THE ITEMS TOGETHER WITH THEIR P VALUES WILL BE FOUND IN APPENDIX A. TRIADS WERE THEN FORMED BY COMBINING ITEMS FROM DIFFERENT FACTORS WITH APPROXIMATELY EQUAL AFFECTIVE VALUE. IN NO CASE DO THE P VALUES OF THE ITEMS IN ANY TRIAD DIFFER BY AS MUCH AS .1 ON A 1.00 TO 5.00 SCALE. MOST OF THE ITEMS DIFFER BY LESS THAN .05. AN EFFORT WAS MADE TO COMBINE ANY SINGLE FACTOR WITH AS MANY OTHER FACTORS AS FEASIBLE WHILE LIMITING THE RANGE OF P VALUES WITHIN A TRIAD. IN NO CASE DID THREE FACTORS APPEAR TOGETHER IN MORE THAN ONE TRIAD. ONE HUNDRED THIRTY-TWO TRIADS WERE DEVELOPED, EACH FACTOR BEING MEASURED FROM 13 TO 16 TIMES.

THE TRIADS IN THE FORM IN WHICH THEY WERE ADMINISTERED IN THE RESEARCH ARE PRESENTED IN APPENDIX B.

DETERMINATION OF MFFC SCALE RELIABILITIES

TWO TRIPS WERE MADE TO THE NAVAL TRAINING STATION, BAINBRIDGE, MARYLAND TO COLLECT THE DATA NECESSARY TO COMPUTE SCALE RELIABILITIES. THE MFFC PERSONALITY INVENTORY WAS ADMINISTERED TWICE TO A GROUP OF RECRUITS. THE TEST-RETEST DATA ON 119 RECRUITS WERE USED IN CALCULATING THE SCALE RELIABILITIES. THE RELIABILITY COEFFICIENTS OF THE 28 SCALES ARE INDICATED BELOW.

1. AGREEABLENESS	.36
2. ALERTNESS, AUTISTIC TENDENCY	.33
3. CYCLOID TENDENCY	.59
4. CONVENTIONALITY	.32
5. DEPENDABILITY	.51
6. DOMINANCE	.62
7. EMOTIONALITY	.47

8. EMOTIONAL IMMATURITY	.38
9. FEARFULNESS	.65
10. GREGARIOUSNESS	.64
11. HONESTY	.46
12. INTEREST IN ATHLETICS	.84
13. INTEREST IN FAMILY	.68
14. INTEREST IN PHILOSOPHIZING	.59
15. INTEREST IN SEX	.68
16. METICULOUSNESS	.45
17. MASCULINITY VS. FEMININITY	.52
18. IMPULSIVENESS	.49
19. NERVOUSNESS	.50
20. PSYCHOTIC TENDENCY	.30
21. PERSISTENCE	.47
22. RELIGIOUS ATTITUDE, INTEREST IN RELIGION	.78
23. SELF CONFIDENCE	.61
24. SENSITIVE ATTITUDE	.40
25. SELF-CONSCIOUSNESS	.79
26. SOCIABILITY	.63
27. SELF-SUFFICIENCY	.68
28. SURGENCY	.50

CONSIDERING THE SCALE LENGTH AND THE PROJECTED USE OF THE DATA, IT
APPEARED THAT ALL SCALES WERE CONSISTENT ENOUGH TO ALLOW THEIR USE IN THE DATA
ANALYSIS PHASE OF THIS STUDY.

CHAPTER IV

DATA COLLECTION AND ANALYSIS

ARRANGEMENTS WERE MADE BY THE PROJECT OFFICER THROUGH COMDESLANT TO MAKE POSSIBLE THE MAJOR DATA COLLECTION PHASE OF THE STUDY. THROUGH THE COMDESLANT REPRESENTATIVE IN THE NORFOLK, VIRGINIA AREA, ARRANGEMENTS WERE MADE TO ADMINISTER THE RESEARCH INSTRUMENTS TO THE ENLISTED MEN ON SIX DESTROYERS. THIS CHAPTER DESCRIBES THE ADMINISTRATION PROCEDURES AS WELL AS THE SCORING OF THE INSTRUMENTS AND A DESCRIPTION OF THE DATA ANALYSIS. CONCLUSIONS ARE PRESENTED IN THE FINAL SECTION.

ADMINISTRATION

THE SIX DESTROYERS WHICH TOOK PART IN THE RESEARCH WERE THE USS CONE, USS HOLDER, USS MEREDITH, USS NEW, USS RICH, AND THE USS STRIBLING. THE CHIEF HOSPITAL CORPMEN OF THESE SIX SHIPS MET WITH A REPRESENTATIVE OF PSYCHOLOGICAL RESEARCH ASSOCIATES FOR TRAINING IN ADMINISTRATION PROCEDURES. SINCE ALL INSTRUMENTS DEVELOPED IN THE COURSE OF THE STUDY WERE OF THE SELF ADMINISTERING VARIETY, THIS TRAINING PROGRAM WAS EASILY ACCOMPLISHED. THE HMC'S WERE SUPPLIED WITH A BOOKLET WHICH CONTAINED GENERAL COMMENTS ON THE ADMINISTRATION; DIRECTIONS FOR ADMINISTERING THE INSTRUMENTS; SPECIFIC INSTRUCTIONS WITH REGARD TO EACH INSTRUMENT; AND DETAILS RELEVANT TO THE RETURN OF THE MATERIALS ONCE THE DATA HAD BEEN COLLECTED. A COPY OF THIS BOOKLET WILL BE FOUND IN QUARTERLY STATUS REPORT NUMBER 7. THE DATA WERE COLLECTED WHILE THE SHIPS WERE AT SEA DURING THE FIRST TWO WEEKS OF DECEMBER 1955.

THE INSTRUMENTS WERE ADMINISTERED TO ALL ENLISTED MEN ON EACH SHIP EXCEPT CHIEF PETTY OFFICERS, IN GROUPS OF 25 TO 30 MEN. EACH GROUP OF MEN ATTENDED TWO SESSIONS IN THE MESS HALL; THE FIRST LASTED ABOUT AN HOUR, THE SECOND

TOOK ABOUT TWO HOURS. DURING THE FIRST SESSION, THE JOB ADJUSTMENT INVENTORY AND THE PEER NOMINATION WORK SHEET WERE COMPLETED. DURING THE SECOND SESSION, THE MFFC PERSONALITY INVENTORY WAS ADMINISTERED. THE ADMINISTRATIVE DIRECTIONS EMPLOYED IN THESE TWO SESSIONS WILL BE FOUND IN APPENDIX C.

THE PERFORMANCE RATING SCALE WAS FILLED OUT BY THE IMMEDIATE SUPERIORS OF THE SUBJECTS INVOLVED IN THE STUDY.

COMMENTS SOLICITED FROM THE CHIEF PETTY OFFICERS UPON THE COMPLETION OF DATA COLLECTION INDICATED THAT NO EVENTS OCCURRED WHICH HAD NOT BEEN ANTICIPATED IN THE TRAINING FOR THE ADMINISTRATION. THE DATA FROM ALL SIX SHIPS WERE RETURNED TO THE CONTRACTOR'S OFFICE FOR SCORING.

COPIES OF THE CRITERION INSTRUMENTS WILL BE FOUND IN TECHNICAL REPORT NUMBER 1. THE MFFC PERSONALITY INVENTORY IS PRESENTED IN APPENDIX B OF THE PRESENT REPORT.

SCORING AND DATA ANALYSIS

IN ADMINISTERING THE MFFC PERSONALITY INVENTORY, EACH SUBJECT WAS DIRECTED TO SELECT ONE OF THE THREE ITEMS OF A TRIAD AS MOST LIKE HIM, ONE AS LEAST LIKE HIM AND TO LEAVE UNMARKED THE ITEM WHICH REMAINED. EACH FACTOR OR SCALE OF THE MFFC PERSONALITY INVENTORY WAS REPRESENTED BY ITEMS WHICH WERE EITHER POSITIVELY OR NEGATIVELY RELATED TO THE FACTOR. FOR EXAMPLE, THE ITEM "YOU ACCEPT SOCIAL INVITATIONS RATHER THAN STAY HOME ALONE" IS POSITIVELY RELATED TO THE FACTOR SOCIABILITY; WHILE THE ITEM "YOU HAVE DIFFICULTY STARTING A CONVERSATION WITH STRANGERS" IS NEGATIVELY RELATED TO THIS FACTOR. WEIGHTS OF 1, 2, AND 3 WERE ASSIGNED TO THE SUBJECTS' CHOICES ACCORDING TO THE FOLLOWING SCHEME:

- A. ITEMS LEFT UNMARKED WERE WEIGHTED 2
- B. ITEMS MARKED MOST WERE WEIGHTED 3 IF POSITIVELY
RELATED TO THE FACTORS; 1 IF NEGATIVELY RELATED.

C. ITEMS MARKED LEAST WERE WEIGHTED 1 IF POSITIVELY
RELATED TO THE FACTOR; 3 IF NEGATIVELY RELATED.

AN INDEPENDENT SCORING OF A SAMPLE OF THESE PAPERS INDICATED A HIGH DEGREE OF CORRESPONDENCE BETWEEN DIFFERENT SCORERS. THE SCORING RESULTED IN 28 PREDICTOR SCORES FOR EACH OF THE MEN TAKING PART IN THE STUDY. THESE 28 SCORES WERE PUNCHED INTO IBM CARDS.

THE CRITERION INSTRUMENTS WERE SCORED AS INDICATED IN TECHNICAL REPORT NUMBER 1. THE THREE STANDARD SCORES THUS OBTAINED WERE ALSO PUNCHED INTO THE IBM CARDS AND PEARSON PRODUCT-MOMENT CORRELATIONS WERE OBTAINED.

RESULTS

THE CORRELATIONS BETWEEN EACH OF THE 28 SCALES AND THE THREE CRITERION MEASURES WERE COMPUTED FOR A TOTAL OF 518 MEN FROM THREE OF THE SIX SHIPS INVOLVED IN THE STUDY. THE SCORES OF THE MEN ON THE OTHER THREE SHIPS WERE SET ASIDE FOR POSSIBLE LATER USE IN MORE DETAILED ANALYSES. THE 84 PEARSON PRODUCT-MOMENT CORRELATIONS ARE PRESENTED IN TABLE 1 ALONG WITH THE MEANS AND STANDARD DEVIATIONS OF EACH OF THE 28 SCALES.

EXAMINATION OF THE CORRELATIONS PRESENTED IN TABLE 1 REVEALS A CONSIDERABLE NUMBER OF THEM WHICH ARE SIGNIFICANTLY DIFFERENT FROM ZERO. THE CORRELATIONS FALL WITHIN A RELATIVELY RESTRICTED RANGE HOWEVER. WHEN THE SHORTNESS OF THE 28 SCALES IS CONSIDERED SUCH RESTRICTION IN RANGE IS NOT SURPRISING.

FOR GREATER CLARITY THE SCALES WHICH SHOWED SIGNIFICANT RELATIONSHIPS WITH THE THREE CRITERION MEASURES ARE ABSTRACTED FROM TABLE 1 AND ARE PRESENTED IN TABLE 2.

TABLE I

MEANS AND STANDARD DEVIATIONS OF THE 28 PREDICTOR SCALES AND THE
CORRELATIONS OF THE SCALES WITH THE CRITERION MEASURES. N=512

	MEAN	S.D.	JOB ADJUSTMENT INVENTORY	PERFORMANCE RATING SCALE	PEER NOMINATIONS
AGREEABLENESS	29.77	3.61	.01	.01	.05
ALERTNESS VS. AUTISTIC	27.15	3.37	.00	.04	.02
CYCLOID TENDENCY	28.97	4.02	-.01	-.02	.05
CONVENTIONALITY	28.60	3.49	.05	.13**	.16**
DEPENDABILITY	25.92	3.57	.16**	.06	-.06
DOMINANCE	27.38	3.64	.04	.04	-.15**
EMOTIONALITY	30.62	4.99	-.05	.02	.00
EMOTIONAL IMMATURITY	25.01	3.17	-.12**	-.00	-.02
FEARFULNESS	28.20	4.46	.04	-.10*	-.02
GREGARIOUSNESS	30.61	4.54	.08	-.00	.10*
HONESTY	31.57	3.61	-.03	.01	.06
INTEREST IN ATHLETICS	25.53	5.82	-.01	.01	.03
INTEREST IN FAMILY	29.42	4.87	-.09*	.04	.08
INTEREST IN PHILOSOPHIZING	30.72	4.09	-.12**	.02	.02
INTEREST IN SEX	31.44	4.42	-.14**	-.11*	.03
METICULOUSNESS	26.63	3.96	.07	-.02	-.12**
MASCULINITY VS. FEMININITY	28.25	3.53	-.07	-.01	.08
IMPULSIVENESS	28.69	4.25	.01	-.04	-.00
NERVOUSNESS	29.50	3.63	-.05	-.03	-.05
PSYCHOTIC TENDENCY	26.61	3.70	-.02	-.07	-.06
PERSISTENCE	26.75	3.70	.05	.09*	-.03
RELIGIOUS ATTITUDE	27.21	5.12	-.01	-.05	.01
SELF-CONFIDENCE	29.66	3.88	-.03	.04	-.11*
SENSITIVE ATTITUDE	29.51	3.63	.06	.01	.06
SELF-CONSCIOUSNESS	30.20	4.45	.01	.11*	.08
SOCIABILITY	28.73	4.37	-.06	-.14**	.04
SELF-SUFFICIENCY	28.61	4.62	-.03	.12**	-.10*
SURGENCY	24.89	4.41	-.03	-.02	-.05

* SIGNIFICANT BETWEEN THE .01 AND .05 LEVEL.

** SIGNIFICANT AT OR BEYOND THE .01 LEVEL.

TABLE 2

PERSONALITY FACTORS WHICH YIELDED SIGNIFICANT
RELATIONSHIPS WITH THE CRITERION MEASURES

CRITERION	JOB ADJUSTMENT INVENTORY	PERFORMANCE RATING SCALE	PEER NOMINATIONS
POSITIVE CORRELATIONS	DEPENDABILITY**	CONVENTIONALITY**	CONVENTIONALITY**
		PERSISTENCE *	GREGARIOUSNESS*
		SELF-CONSCIOUSNESS*	
		SELF-SUFFICIENCY**	
NEGATIVE CORRELATIONS	EMOTIONAL IMMATURITY**	FEARFULNESS*	DOMINANCE**
	INTEREST IN FAMILY*	INTEREST IN SEX*	METICULOUSNESS**
	INTEREST IN PHILOSOPHIZING**	SOCIABILITY**	SELF-CONFIDENCE*
	INTEREST IN SEX**		SELF-SUFFICIENCY*

* SIGNIFICANT BETWEEN THE .01 AND .05 LEVEL.

** SIGNIFICANT AT OR BEYOND THE .01 LEVEL.

SCALE RELATIONSHIPS WITH JOB ADJUSTMENT

AS CAN BE SEEN IN TABLE 2, ONLY ONE OF THE 28 SCALES YIELDED A POSITIVE CORRELATION WITH SCORES ON THE JOB ADJUSTMENT INVENTORY. ON A PRIORI GROUNDS ONE MIGHT HAVE EXPECTED A RELATIONSHIP BETWEEN DEPENDABILITY AND THE PERFORMANCE RATING SCALE SINCE THE LATTER CONSISTS OF RATINGS MADE BY THE MEN'S IMMEDIATE SUPERVISORS, AND DEPENDABILITY WOULD APPEAR TO BE A CHARACTERISTIC ATTRACTIVE TO SUPERVISORS. THE FOUR SCALES WHICH RELATE NEGATIVELY TO JOB ADJUSTMENT APPEAR TO BE CONSISTENT WITH WHAT MIGHT HAVE BEEN EXPECTED.

SCALE RELATIONSHIPS WITH RATINGS BY SUPERIORS

FOUR PERSONALITY FACTORS SHOWED A POSITIVE RELATIONSHIP WITH THE PERFORMANCE RATING SCALE AND THREE RESULTED IN A NEGATIVE RELATIONSHIP. ONE OF THE LATTER APPEARS INCONSISTENT. THE NEGATIVE RELATIONSHIP OF SOCIABILITY WITH RATINGS BY SUPERIORS SUGGESTS THAT SUPERIORS DO NOT LIKE SOCIABLE MEN. THE INCONSISTENCY APPEARS GREATER WHEN, AS TABLE 2 SHOWS, PEER CHOICES ARE POSITIVELY CORRELATED WITH GREGARIOUSNESS. EXAMINATION OF THE ITEMS OF THE SOCIABILITY SCALE SUPPLIED A REASONABLE EXPLANATION OF THE SEEMING INCONSISTENCY. IT APPEARS THAT THE ITEMS MAKING UP THIS SCALE ARE HEAVILY WEIGHTED IN THE DIRECTION OF AGGRESSIVE SOCIABILITY IN DISTINCTION TO THE GREGARIOUS SCALE, THE ITEMS OF WHICH ARE OF THE "LIKING TO BE WITH PEOPLE" VARIETY. AGGRESSIVE SOCIABILITY MAY BE INTERPRETED BY A MAN'S IMMEDIATE SUPERIOR AS A THREAT TO THE SUPERIOR'S STATUS. MORE THREAT MAY BE ANTICIPATED FROM A MAN WHO "IS NOT TROUBLED WITH SHYNESS" THAN FROM THE GREGARIOUS INDIVIDUAL WHO "PREFERS TO WORK WITH OTHER PEOPLE."

RELATIONSHIPS WITH PEER NOMINATIONS

THAT CONVENTIONALITY IS RELATED POSITIVELY TO BEING LIKED BY ONE'S PEERS AS WELL AS BY ONE'S SUPERIORS IS NOT SURPRISING. LIKEWISE ONE COULD EXPECT A POSITIVE RELATIONSHIP WITH GREGARIOUSNESS. AT LEAST TWO OF THE FOUR NEGATIVE RELATIONSHIPS WITH THIS CRITERION SUGGEST THAT AGGRESSIVENESS, OFTEN LOOKED UPON AS A DESIRABLE MILITARY CHARACTERISTIC, DOES NOT LEAD TO GETTING ALONG WITH ONE'S PEERS IN THE NAVY. SELF-CONFIDENCE AND SELF-SUFFICIENCY AS AGGRESSIVE CHARACTERISTICS, WHILE SEEMINGLY DESIRABLE, ARE NEGATIVELY RELATED TO PEER NOMINATIONS.

CONCLUSIONS

THE RELATIVELY LOW DEGREE OF CORRELATION OBTAINED BETWEEN THE CRITERION MEASURES AND THE PERSONALITY VARIABLES INVESTIGATED IN THIS STUDY SUGGESTS STRONGLY THAT FURTHER DEVELOPMENT OF SCALES SUCH AS THOSE USED IS NOT A PROFITABLE UNDERTAKING FOR SCREENING NAVAL RECRUITS. THE INCREASED PREDICTIVE VALUE WHICH MIGHT BE OBTAINED BY USING SUCH TECHNIQUES WOULD NOT APPEAR TO WARRANT THEIR FURTHER STUDY. IN VIEW OF THE SELECTION RATIOS THAT CAN BE REALISTICALLY EMPLOYED IN NAVAL SELECTION PROGRAMS THE DEGREE OF CORRELATION FOUND APPEARS INADEQUATE.

IT SHOULD BE EMPHASIZED, HOWEVER, THAT THE LACK OF APPRECIABLE RELATIONSHIP IS VERY LIKELY TO BE, IN PART, A RESULT OF THE SUCCESSFULNESS OF PRESENT SELECTION PROCEDURES EMPLOYED BY THE NAVY. IT MUST BE REMEMBERED THAT THE SAMPLES EMPLOYED IN THIS STUDY INCLUDED ONLY MEN WHO HAD SUCCESSFULLY CLEARED SELECTION BARRIERS. THE PROBABILITY IS HIGH THAT IF AN UNSELECTED POPULATION WERE TO BE ADMINISTERED THESE SCALES, THEN ALLOWED TO ENTER ACTIVE NAVAL SERVICE, THE VALIDITIES OBTAINED WOULD BE SUBSTANTIAL.

IT WILL BE REMEMBERED THAT TWO POSSIBLE OUTCOMES OF THIS RESEARCH WERE EXPECTED.

1. THE PROVISION OF A FRAMEWORK FOR STRUCTURING
NAVY PSYCHIATRISTS' EVALUATION OF RECRUITS.
2. THE DEVELOPMENT OF A BASIS FOR THE CONSTRUCTION
OF OBJECTIVE MEASURES OF PREDICTORS OF ADJUST-
MENT TO THE NAVY.

WITH REFERENCE TO THE SECOND OF THESE, IT IS APPARENT THAT THE VARIABLES EMPLOYED IN THIS STUDY AS POSSIBLE PREDICTORS DO NOT APPEAR TO WARRANT USE AS A BASIS FOR THE CONSTRUCTION OF OBJECTIVE MEASURES. IT IS SUGGESTED, HOWEVER, THAT THE FORCED CHOICE DESIGN MIGHT BE INVESTIGATED FOR USE IN PSYCHONEUROTIC INVENTORIES SUCH AS THE ONE ON MEDICAL SCREENING FORM A. THE FORCED CHOICE PARADIGM EITHER IN THE "PAIRED COMPARISONS" OR THE "TRIAD" FORM SHOULD LEAD TO A REDUCTION IN THE INFLUENCE OF BOTH NEGATIVE AND POSITIVE MALINGERING.

REFERRING TO THE FIRST OF THE POSSIBLE OUTCOMES MENTIONED ABOVE, IT IS EVIDENT THAT NO COMPELLINGLY VALID FRAMEWORK HAS PRESENTED ITSELF. HOWEVER, IT IS LIKELY THAT IT WOULD BE PROFITABLE TO GIVE GREATER ATTENTION IN SELECTION INTERVIEWS TO THOSE PERSONALITY VARIABLES WHICH RESULTED IN SIGNIFICANT RELATIONSHIPS WITH THE CRITERIA.

B I B L I O G R A P H Y

1. AITA, J. A. EFFICACY OF THE BRIEF CLINICAL INTERVIEW METHOD IN PREDICTING ADJUSTMENTS: FIVE YEAR FOLLOW-UP STUDY OF 304 ARMY INDUCTEES. ARCH. NEUROL. & PSYCHIAT., CHICAGO, 1949, 61, 170-176.
2. ANASTASI, ANNE, AND FOLEY, J. P. PSYCHIATRIC SELECTION OF FLYING PERSONNEL: V. THE HUMAN FIGURE DRAWING TEST AS AN OBJECTIVE PSYCHIATRIC SCREENING AID FOR STUDENT PILOTS. USAF SCH. AVIAT. MED., PROJ. No. 21-37-002(5), OCTOBER 1952.
3. ANASTASI, ANNE, FOLEY, J. P., JR., AND SACKMAN, H. PSYCHIATRIC SCREENING OF FLYING PERSONNEL: AN EMPIRICAL EVALUATION OF THE SAM PERSONALITY SKETCH TEST. USAF SCH. AVIAT. MED., PROJ. No. 21-0202-0007(6), APRIL 1954.
4. BARRY, J. R., AND RAYNOR, G. H. PSYCHIATRIC SCREENING OF FLYING PERSONNEL: RESEARCH ON THE CORNELL INDEX. USAF SCH. AVIAT. MED., PROJ. No. 21-0202-0007(4), MAY 1953.
5. BARRY, J. R., SELLS, S. B., AND TRITES, D. K. PSYCHIATRIC SCREENING OF FLYING PERSONNEL: RESEARCH ON THE CORNELL WORD FORM. USAF SCH. AVIAT. MED., PROJ. No. 21-0202-0007(7), MAY 1954.
6. BENTON, A. L., BECHTOLDT, H. P. THE ENLISTED PERSONAL INVENTORY (PART I) AS A PREDICTOR OF PERSONAL ADJUSTMENT AFTER RECRUIT TRAINING. BUREAU OF NAVAL PERSONNEL, TECHNICAL BULLETIN 55-6, JUNE 1, 1955.
7. BENTON, A. L., WINDLE, C. D., AND ERDICE, ELIZABETH. THE SCREENING EFFICACY OF THE ENLISTED PERSONAL INVENTORY (SHIPLEY): A STUDY OF 2164 GREAT LAKES RECRUITS. BUR. OF NAVAL PERS. TECH. BULL., 54-16, CONTRACT NO. ONR 311(00), OCT. 1954.
8. DANIELSON, J. R., AND CLARK, J. H. A PERSONALITY INVENTORY OF INDUCTION SCREENING. J. CLIN. PSYCHOL., 1954, 10, 137-143.
9. DUNCOMBE, AVIS B. A REVIEW OF RESEARCH ON PSYCHIATRIC SCREENING FOR THE ARMED FORCES. RES. DEVELPM. Bd. COM. HUM. RES. REP., No. 20211, 1952.
10. ELLIS, A., AND CONRAD, H. S. THE VALIDITY OF PERSONALITY INVENTORIES IN MILITARY PRACTICE. PSYCHOL. BULL., 1948, 45, 385-426.
11. FINESINGER, J. E., COBB, S., CHAPPLE, E. D., AND BRAZIER, MARY A. B. AN INVESTIGATION OF PREDICTION OF SUCCESS IN NAVAL FLIGHT TRAINING. REP. No. 81, WASHINGTON: CIVIL AERONAUTICS ADMN., DIV. OF RES., OCT. 1948.
12. FRENCH, ELIZABETH G., AND YARNOLD, J. THE RELATIONSHIP BETWEEN ATTITUDE SURVEY SCORES AND NEUROPSYCHIATRIC BREAKDOWN. USAF HUMAN RESOUR. RES. CENT., RES. BULL., NA 52-38, VI, 1952.

13. FRENCH, J. W., THE DESCRIPTION OF PERSONALITY MEASUREMENTS IN TERMS OF ROTATED FACTORS. EDUCATIONAL TESTING SERVICE, MARCH 1953.
14. GORHAM, W. A., BARKER, W. S., AND HANLON, T. E., A RESEARCH STUDY OF THE PREDICTION OF ADAPTABILITY TO THE NAVY. TECH. REP. NO. 1, BUR. MED. AND SURG., DEPT. OF THE NAVY, CONTRACT NONR 1484(00), OFFICE OF NAVAL RESEARCH, MAY 1955.
15. GUILFORD, J. P. (ED.) PRINTED CLASSIFICATION TESTS. AAF AVIAT. PSYCHOL. PROGR. RES. REP. NO. 5, WASHINGTON: U.S. GOVERNMENT PRINTING OFFICE, 1947.
16. HUNT, W. A., AND WITTSON, C. L., THE NEUROPSYCHIATRIC IMPLICATIONS OF ILLITERACY. U.S. ARMED FORCES MED. J., 1951, 2, 365-369.
17. HUNT, W. A., WITTSON, C. L., AND BURTON, H. W., A VALIDATION STUDY OF NAVAL NEUROPSYCHIATRIC SCREENING. J. CONSULT. PSYCHOL., 1950, 14, 35-39.
18. HUNT, W. A., WITTSON, C. L., AND BURTON, H. W., A FURTHER VALIDATION OF NEUROPSYCHIATRIC SCREENING. J. CONSULT. PSYCHOL., 1950, 14, 485-488.
19. HUNT, W. A., WITTSON, C. L., AND HUNT, E. B., MILITARY PERFORMANCE OF A GROUP OF MARGINAL NEUROPSYCHIATRIC CASES. AMER. J. PSYCHIAT., 1952, 109, 168-171.
20. HUNT, W. A., WITTSON, C. L., AND HUNT, E. B., HIDDEN COSTS IN THE UTILIZATION OF THE PSYCHIATRICALLY MARGINAL MAN. J. CLIN. PSYCHOL., 1954, 10, 91-92.
21. HUNT, W. A., WITTSON, C. L., AND HUNT, E. B., THE SERVICEABILITY OF MILITARY PERSONNEL OF LOW INTELLIGENCE. J. CLIN. PSYCHOL., 1954, 10, 286-287.
22. MACKIE, R. R., CLEGG, D. A., AND BUCKNER, D. N., VALIDATION AND REVISION OF THE U.S. MEDICAL RESEARCH LABORATORY PERSONAL HISTORY FORM. TECH. REP. NO. 2, SUBMARINE PERSONNEL SELECTION, BUR. OF MED. AND SURG., DEPT. OF THE NAVY, CONTRACT NONR 1113(00), OFFICE OF NAVAL RESEARCH, SEPT. 1954.
23. MACKIE, R. R., STRAYER, F. K., AND BUCKNER, D. N., VALIDATION OF THE U.S. MEDICAL RESEARCH LABORATORY PERSONNEL ASSESSMENTS. TECH. REP. NO. 1, SUBMARINE PERSONNEL SELECTION, BUR. MED. AND SURG., DEPT. OF THE NAVY, CONTRACT 1113(00), OFFICE OF NAVAL RESEARCH, DEC. 1954.
24. ROOS, C., BIBLIOGRAPHY OF MILITARY PSYCHIATRY 1947-1952. WASHINGTON: ARMED FORCES MEDICAL LIBRARY, 1953.
25. SELLS, S. B., A RESEARCH PROGRAM ON THE PSYCHIATRIC SELECTION OF FLYING PERSONNEL. I. METHODOLOGICAL INTRODUCTION AND EXPERIMENTAL DESIGN. USAF SCH. AVIAT. MED., PROJ. NO. 21-37-002 (1), NOV. 1951.

26. SELLS, S. B., FRESE, F. J., AND LANCASTER, W. H. RESEARCH ON THE PSYCHI-
ATRIC SELECTION OF FLYING PERSONNEL. II PROGRESS ON DEVELOPMENT OF
SAM GROUP INK-BLOT TEST. USAF SCH. AVIAT. MED., PROJ. No. 21-37-002(2),
APR. 1952.
27. SINGER, M. THE VALIDITY OF A MULTIPLE-CHOICE PROJECTIVE IN PSYCHOPATHO-
LOGICAL SCREENING. PSYCHOL. MONOGR., No. 314, 1950, 64,8.
28. TRITES, D. K. PSYCHIATRIC SCREENING OF FLYING PERSONNEL: RESEARCH ON THE
PERSONAL INVENTORY TEST. USAF SCH. OF AVIAT. MED., PROJ. No. 21-0202-
0007(8), Nov. 1954.
29. TRITES, D. K., HOLTZMAN, W. H., TEMPLETON, R. C. AND SELLS, S. B. PSYCHI-
ATRIC SCREENING OF FLYING PERSONNEL: RESEARCH ON THE SAM SENTENCE
COMPLETION TEST. USAF SCH. AVIAT. MED., PROJ. No. 21-0202-0007(3),
JULY 1953.
30. WEINSTOCK, H. I., AND WATSON, R. I. THE USEFULNESS OF THE CORNELL SELECTEE
INDEX AT THE NEUROPSYCHIATRIC UNIT OF NAVAL TRAINING STATION. NAV. MED.
BULL., 1946, 46, 1583-1588.
31. WEXLER, M. AN INVESTIGATION OF PSYCHIATRIC SCREENING TESTS IN THE UNITED
STATES NAVY. WASHINGTON: U.S. NAVY, BUREAU OF NAVAL PERSONNEL, 1948.
32. WITTON, C. L., AND HUNT, W. A. THE PREDICTIVE VALUE OF THE BRIEF
PSYCHIATRIC INTERVIEW. AMER. J. PSYCHIAT., 1951, 107, 582-585.
33. WITTON, C. L., HUNT, W. A., AND STEVENSON, I. A FOLLOW-UP STUDY OF
NEUROPSYCHIATRIC SCREENING. J. ABNORM. SOC. PSYCHOL., 1946, 41, 79-82.
34. ZUBIN, J. RECENT ADVANCES IN SCREENING THE EMOTIONALLY MALADJUSTED. J.
CLIN. PSYCHOL., 1948, 4, 56-62.

APPENDIX A

ITEMS USED TO CONSTRUCT TRIADS FOR
THE MFFC PERSONALITY INVENTORY, WITH
THEIR P VALUES AND THE PERSONALITY
FACTOR OR SCALE TO WHICH THEY BELONG.
POSITIVE AND NEGATIVE RELATION TO THE
FACTOR IS SHOWN BY PLUS MARKS AND MINUS
SIGNS.

	P	FACTOR
YOU WANT TO BE ABLE TO GIVE YOUR CHILDREN THE BEST EDUCATION THAT THEY COULD POSSIBLY HAVE.	4.70	IF +
YOU KEEP YOUR PROMISES.	4.57	DE +
YOU WANT YOUR PARENTS NEVER TO BE LACKING THE THINGS NECESSARY FOR COMFORTABLE LIVING.	4.53	IF +
YOU ARE NEAT AND CLEAN IN YOUR PERSONAL APPEARANCE.	4.53	ME +
YOU ARE COOPERATIVE.	4.46	A +
YOU KEEP YOUR HEAD IN TIMES OF EXCITEMENT AND STRESS.	4.40	E -
THE WELFARE OF YOUR FAMILY COMES FIRST WITH YOU.	4.39	IF +
YOU ARE DEPENDABLE.	4.27	DE +
YOU WANT TO FEEL THAT YOU ARE IN TOUCH WITH GOD SO THAT HE CAN HELP YOU IN YOUR STRUGGLES.	4.30	REIR +
YOU USUALLY FEEL THAT LIFE IS WORTHWHILE.	4.21	E -
YOU WANT TO SEE SOMETHING DONE ABOUT ALL THOSE PEOPLE WHO ARE PUTTING THIS COUNTRY IN DANGER BY GIVING AWAY OUR SECRETS.	4.20	FE +
YOU BELIEVE THAT SOMETHING SHOULD BE DONE TO CUT DOWN THE NUMBER OF TRAFFIC DEATHS.	4.24	FE +
YOU STOP AND THINK THINGS OVER BEFORE DOING SOMETHING.	4.20	MP -
YOU ARE ORDERLY.	4.12	ME +
YOU BELIEVE THAT SUNDAY SHOULD BE MORE STRICTLY OBSERVED AS A DAY OF REST AND CHURCH GOING.	4.15	REIR +
YOU USUALLY GET OUT OF DIFFICULT SITUATIONS WITHOUT HELP.	4.15	SS +
YOU LIKE TO LISTEN TO MUSIC.	4.12	CV -
YOU LIKE TO ATTEND FOOTBALL OR BASEBALL GAMES.	4.08	IA +

	P	FACTOR
DURING THE PAST FEW YEARS YOU HAVE BEEN WELL MOST OF THE TIME.	4.01	E -
YOU ARE JUST AS HEALTHY AS MOST OF YOUR FRIENDS.	4.05	E -
YOU ARE SELDOM LATE FOR SCHOOL OR WORK	4.00	De +
ANYTHING YOU DO MUST BE DONE PERFECTLY BEFORE YOU ARE SATISFIED.	3.98	ME +
YOU ARE CONSIDERED TO BE A PRACTICAL PERSON.	3.97	CV +
WHEN YOU ARE SUPPOSED TO MEET SOMEONE AT A CERTAIN TIME, YOU DON'T LIKE TO BE EVEN A LITTLE LATE.	4.00	De +
YOU THINK IT IS VALUABLE FOR A PERSON TO HAVE STRONG WILLPOWER.	3.99	Pe +
YOU DO NOT EASILY GIVE UP TASKS IF YOU RUN INTO DIFFICULTIES.	4.03	Pe +
YOU ARE A RELIGIOUS PERSON.	4.03	REIR +
YOU HAVE VERY FEW ARGUMENTS WITH MEMBERS OF YOUR FAMILY.	3.94	Pc -
YOU ENJOY BEING IN LARGE GATHERINGS SUCH AS PARTIES OR DANCES.	3.93	Gs +
YOU LIKE TO GO TO A GOOD MOVIE OR PLAY EVERY WEEK OR SO.	3.87	Ix +
YOU TEND TO BE VERY CAREFUL ABOUT DETAILS.	3.91	ME +
WHEN YOU DO SOMETHING YOU DO IT COMPLETELY, THAT IS, YOU DON'T OVERLOOK A THING.	3.89	ME +
WHEN YOU WRITE A REPORT, YOU RE-READ IT MANY TIMES TO MAKE SURE IT IS FREE OF ERRORS.	3.87	ME +
YOU USUALLY PLAN OUT YOUR WORK CAREFULLY BEFORE YOU BEGIN IT.	3.87	MP -
YOU SUCCEED IN KEEPING YOUR EMOTIONS OF WHATEVER KIND, UNDER VERY GOOD CONTROL.	3.89	NE -
YOU HAVE A GOOD APPETITE.	3.85	E -

	P	FACTOR
YOU REALLY FEEL BAD WHEN OTHER PEOPLE HAVE TOUGH LUCK.	3.85	SE +
YOU ACCEPT SOCIAL INVITATIONS RATHER THAN STAY HOME ALONE.	3.86	SO +
YOU THINK THAT NEARLY ALL PEOPLE TRY TO DO THE RIGHT THING WHEN GIVEN A CHANCE.	3.77	A +
YOU WANT TO BE SMARTLY DRESSED, WITH A PERSONAL APPEARANCE THAT OTHERS MUST ADMIRE.	3.80	CV +
YOU CAN STAND CRITICISM WITHOUT BEING HURT.	3.79	E -
YOU USUALLY PLAN SOMETHING OUT BEFORE YOU START TO DO IT.	3.78	MP -
YOU WANT TO TRAVEL AND EXPLORE UNKNOWN CORNERS OF THE EARTH.	3.75	IX +
YOU USUALLY KEEP IN TOUCH WITH THINGS GOING ON AROUND YOU.	3.80	ALAU +
YOU LIKE MECHANICS MAGAZINES.	3.76	MF +
YOU NEVER STOP SOMETHING ONCE YOU START IT.	3.79	PE +
YOU FIND IT EASY TO MAKE UP YOUR OWN MIND.	3.83	SS +
YOU ARE SELF-CONFIDENT ABOUT YOUR ABILITIES.	3.73	SC +
YOU ARE QUICK IN YOUR ACTIONS.	3.69	SU +
IF YOU WERE A BOSS ON A JOB, YOU WOULD FIND IT HARD TO LAY OFF MEN WHEN THE WORK IS SHORT.	3.72	SE +
YOU LIKE TO GO TO PARTIES AND AFFAIRS WHERE THERE IS LOTS OF LOUD FUN.	3.66	MF +
WHEN YOU ARE STOPPED FROM GETTING SOMETHING WORTHWHILE, YOU ADJUST BY FINDING SOMETHING ELSE ALMOST AS GOOD.	3.65	PE -
YOU DO NOT TIRE QUICKLY.	3.66	E -
YOUR FEELINGS ARE NOT EASILY HURT.	3.64	MF +

	P	FACTOR
YOU BELIEVE THAT SOMETHING SHOULD BE DONE ABOUT THE DANGER OF UNEMPLOYMENT AS A RESULT OF THE TENDENCY TO REPLACE MEN WITH MACHINES.	3.62	Fe +
YOU WOULD RATHER WIN THAN LOSE IN A GAME.	3.61	Ho +
YOU ALWAYS TRY TO UNDERSTAND YOURSELF AND WHY YOU ACT AS YOU DO.	3.64	Ip +
YOU WANT TO MAKE LOVE TO A GIRL YOU FIND BEAUTIFUL.	3.60	Ix +
YOU WOULD RATHER BE A FORESTER THAN A SCHOOL TEACHER.	3.63	Se -
YOU ARE SOFT-HEARTED	3.61	Se +
YOU TAKE A BIG PART IN SOCIAL AFFAIRS AND ENTERTAINMENTS.	3.60	So +
YOU ARE AN IMPORTANT PERSON.	3.60	Su +
YOU ARE ALMOST NEVER BOTHERED BY PAINS OVER YOUR HEART OR CHEST.	3.56	E -
YOU ARE INTERESTED IN SERIOUS PROBLEMS OF LIFE AND LIKE TO HAVE LONG DISCUSSIONS ON THEM WITH YOUR FRIENDS.	3.53	Ip +
YOU ARE INTERESTED IN READING ABOUT GREAT RELIGIOUS FAITHS.	3.53	IrRe +
YOU USUALLY FACE TROUBLES ALONG WITHOUT SEEKING HELP.	3.56	Ss +
YOUR MOODS CHANGE VERY LITTLE.	3.49	Cd -
ONCE YOU START CONCENTRATING, IT TAKES A LOT TO DISTURB YOU.	3.51	Ne -
YOU LIKE TO ENTERTAIN GUESTS.	3.51	So +
YOUR HANDS AND FEET ARE USUALLY WARM ENOUGH.	3.46	E -
YOU LIKE TO DISCUSS THE MORE SERIOUS QUESTIONS OF LIFE WITH YOUR FRIENDS.	3.45	Ip +
YOU ARE PROBABLY MORE INTERESTED IN GIRLS THAN MOST FELLOWS ARE.	3.44	Ix +

	P	FACTOR
YOU BELIEVE THAT SOMETHING SHOULD BE DONE ABOUT THE DANGER OF UNEMPLOYMENT AS A RESULT OF THE TENDENCY TO REPLACE MEN WITH MACHINES.	3.62	Fe +
YOU WOULD RATHER WIN THAN LOSE IN A GAME.	3.61	Ho +
YOU ALWAYS TRY TO UNDERSTAND YOURSELF AND WHY YOU ACT AS YOU DO.	3.64	Ip +
YOU WANT TO MAKE LOVE TO A GIRL YOU FIND BEAUTIFUL.	3.60	Ix +
YOU WOULD RATHER BE A FORESTER THAN A SCHOOL TEACHER.	3.63	Se -
YOU ARE SOFT-HEARTED	3.61	Se +
YOU TAKE A BIG PART IN SOCIAL AFFAIRS AND ENTERTAINMENTS.	3.60	So +
YOU ARE AN IMPORTANT PERSON.	3.60	Su +
YOU ARE ALMOST NEVER BOTHERED BY PAINS OVER YOUR HEART OR CHEST.	3.56	E -
YOU ARE INTERESTED IN SERIOUS PROBLEMS OF LIFE AND LIKE TO HAVE LONG DISCUSSIONS ON THEM WITH YOUR FRIENDS.	3.53	Ip +
YOU ARE INTERESTED IN READING ABOUT GREAT RELIGIOUS FAITHS.	3.53	IrRe +
YOU USUALLY FACE TROUBLES ALONG WITHOUT SEEKING HELP.	3.56	Ss +
YOUR MOODS CHANGE VERY LITTLE.	3.49	Cd -
ONCE YOU START CONCENTRATING, IT TAKES A LOT TO DISTURB YOU.	3.51	Ne -
YOU LIKE TO ENTERTAIN GUESTS.	3.51	So +
YOUR HANDS AND FEET ARE USUALLY WARM ENOUGH.	3.46	E -
YOU LIKE TO DISCUSS THE MORE SERIOUS QUESTIONS OF LIFE WITH YOUR FRIENDS.	3.45	Ip +
YOU ARE PROBABLY MORE INTERESTED IN GIRLS THAN MOST FELLOWS ARE.	3.44	Ix +

	P	FACTOR
YOU DO MOST THINGS SLOWLY AND WITH MUCH THOUGHT.	3.46	MP -
YOU ALWAYS PREFER THE TYPE OF JOB THAT OFFERS CONSTANT CHANGE, TRAVEL AND VARIETY.	3.47	PE -
YOU WONDER IF YOU'LL BE SUCCESSFUL IN LIFE.	3.45	Sc -
YOU WOULD LIKE TO BE IN A JOB WHERE YOU COULD HELP PEOPLE IN THEIR PERSONAL PROBLEMS.	3.47	SE +
YOU BELIEVE THAT MOST PEOPLE DO WHAT THEY ARE SUPPOSED TO EVEN WHEN THEY ARE NOT WATCHED.	3.43	A +
YOU WANT TO KNOW MORE SCIENCE.	3.40	CV -
YOU ARE PERFECTLY SATISFIED WITH YOURSELF.	3.41	EI +
YOU USUALLY READ THE SPORTS SECTION FIRST IN THE NEWSPAPER.	3.41	IA +
YOU THINK THAT MOST PEOPLE KNOW WHAT TO DO WITHOUT BEING TOLD.	3.36	A +
IN YOUR OPINION MEN ARE SUPERIOR TO WOMEN IN MOST WAYS.	3.36	Ix +
YOU DO NOT MIND SELLING THINGS OR ASKING FOR MONEY FOR A CAUSE IN WHICH YOU ARE INTERESTED.	3.36	SE +
YOU BELIEVE THAT PEOPLE HIGHER UP TAKE ON THEIR SHARE OF THE DIRTY WORK, NOT ALWAYS LEAVING IT FOR OTHERS TO DO.	3.35	A +
WHEN YOU HAVE TO MAKE A DECISION IN A HURRY, YOU PREFER MAKING IT ALONE.	3.35	Ss +
YOU PREFER A BUDDY WHO IS PRACTICAL MINDED RATHER THAN ONE WHO IS SERIOUSLY INTERESTED IN THINKING OUT HIS ATTITUDE TO LIFE.	3.30	IP -
YOU WOULD LIKE A POSITION IN WHICH YOU CHANGED FROM ONE KIND OF TASK TO ANOTHER FREQUENTLY DURING THE DAY.	3.28	PE -
YOU FEEL SELF-CONFIDENT ABOUT YOUR ABILITY TO MAKE A SUCCESS OF YOUR LIFE.	3.30	Sc +
YOU SPEND MORE OF YOUR TIME ON SPORTS THAN THE AVERAGE PERSON.	3.22	IA +

	P	FACTOR
YOU TALK IN A WAY WHICH MAKES YOU APPEAR BETTER THAN OTHER PEOPLE.	3.16	Do +
IF A PERSON DOES NOT DO SOMETHING FOR YOU THAT HE WAS SUPPOSED TO YOU SPEAK TO HIM ABOUT IT.	3.17	Do +
YOU ARE ATTRACTED TO EVERY GOOD LOOKING GIRL YOU SEE.	3.16	Ix +
YOU WANT A MORE PLEASING PERSONALITY.	3.19	Sc -
YOU USUALLY UNDERSTAND A PROBLEM BETTER BY THINKING IT OUT ALONE RATHER THAN BY TALKING IT OVER WITH OTHERS.	3.16	Ss +
YOU ARE INCLINED TO RUSH FROM ONE ACTIVITY TO ANOTHER WITHOUT STOPPING TO REST.	3.22	Su +
WHEN YOU GET BORED YOU LIKE TO STIR UP SOME EXCITEMENT.	3.18	Su +
YOU BELIEVE THAT MOST PEOPLE ARE OUT TO GET MORE THAN THEY GIVE.	3.11	A -
YOU SELDOM WORRY OVER POSSIBLE MISFORTUNES.	3.14	Cd -
YOU BELIEVE THAT ATTACK IS PROBABLY THE BEST DEFENSE.	3.12	Do +
YOU STUDY CAREFULLY THE REASONS PEOPLE ACT AS THEY DO.	3.15	Ip +
YOU FIND IT NECESSARY TO CHANGE YOUR POSITION OFTEN IF YOU HAVE TO SIT AND LISTEN TO A LONGWINDED SPEAKER.	3.13	Ne +
MOST OF THE TIME YOU DON'T UNDERSTAND WHY PEOPLE ACT AS THEY DO.	3.10	Se -
YOU WOULD CHANGE A LOT OF THINGS ABOUT HUMAN NATURE IF YOU COULD HAVE YOUR WAY ABOUT IT.	3.07	A -
YOU LIKE TO SEE FINE PAINTINGS AND ART EXHIBITS.	3.06	Cv -
IT IS IMPORTANT FOR YOU TO GET WHAT YOU WANT EVEN IF YOU HAVE TO FIGHT FOR IT.	2.93	A -
YOU ARE EASILY AWAKENED BY NOISE.	2.96	E +

	P	FACTOR
YOU DO NOT LIKE EVERYONE YOU KNOW.	2.99	Ho +
YOU FEEL EMBARRASSED WHEN YOU HAVE TO ENTER A PUBLIC ASSEMBLY AFTER EVERYONE ELSE HAS BEEN SEATED.	3.01	SN +
YOU DISLIKE HAVING A GROUP OF PEOPLE WATCHING YOU WORK.	2.95	SN +
YOU USUALLY ENJOY SPENDING AN EVENING ALONE.	2.94	Ss +
YOU HAVE RECEIVED ALL THE REWARDS IN LIFE THAT YOU DESERVE.	2.90	A +
IT MAKES YOU FEEL BETTER WHEN SOMEBODY SYMPATHIZES WITH YOU.	2.91	EI +
YOU GET ANGRY SOMETIMES.	2.92	Ho +
IN YOUR OPINION, GIRLS' EDUCATION SHOULD CONSIST MAINLY OF THINGS THAT ARE USEFUL AROUND THE HOUSE.	2.91	Ix +
YOU MAKE DECISIONS ON THE SPUR OF THE MOMENT.	2.88	MP +
ONCE IN A WHILE YOU PUT OFF UNTIL TOMORROW WHAT YOU OUGHT TO DO TODAY.	2.81	Ho +
YOU HAVE A STRONG SEX DRIVE.	2.85	Ix +
YOU ARE EASILY DISTURBED BY DISTRACTIONS WHILE DOING MENTAL WORK.	2.81	NE +
YOU LIKE TO SPEAK IN PUBLIC.	2.90	SN -
YOU LIKE TO CHANGE FROM ONE TYPE OF WORK TO ANOTHER FREQUENTLY.	2.84	PE -
YOU LIKE TO KNOW SOME IMPORTANT PEOPLE BECAUSE IT MAKES YOU FEEL IMPORTANT.	2.80	Ho +
IF ANYONE STEPS AHEAD OF YOU IN A LINE, HE IS LIKELY TO HEAR FROM YOU ABOUT IT.	2.80	A -
YOU FEEL SELF-CONSCIOUS WHEN YOU RECITE IN CLASS.	2.83	SN +

	P	FACTOR
YOU HAVE SOMETIMES FELT THAT DIFFICULTIES WERE PILING UP SO HIGH THAT YOU COULD NOT OVERCOME THEM.	2.77	Pc +
IF SOMEONE WORKING FOR YOU FAILED TO HAVE HIS WORK DONE ON TIME YOU'D GIVE HIM A PIECE OF YOUR MIND.	2.76	Do +
YOU USUALLY PREFER TO DO YOUR OWN PLANNING ALONE RATHER THAN WITH OTHERS.	2.79	Ss +
YOU SOMETIMES MAKE QUICK DECISIONS THAT YOU LATER WISH YOU HADN'T MADE.	2.79	MP +
YOU LIKE TO TALK ABOUT SEX.	2.80	MF +
YOU BELIEVE IT IS MORE IMPORTANT TO MAKE MONEY THAN TO SPEND TIME THINKING ABOUT LIFE.	2.82	IP -
AT PERIODS YOUR MIND SEEMS TO WORK MORE SLOWLY THAN USUAL.	2.79	Pc +
YOU WOULD RATHER WORK THINGS OUT IN YOUR OWN WAY THAN TO ACCEPT SUGGESTIONS FROM OTHERS.	2.84	Ss +
YOU SWEAT VERY EASILY EVEN ON COOL DAYS.	2.80	Su +
YOU NEVER WORRY ABOUT YOUR LOOKS.	2.86	SU +
YOU HAVE SOME TRAIT IN WHICH YOU FEEL SUPERIOR TO MOST PEOPLE.	2.74	Do +
PEOPLE OFTEN DISAPPOINT YOU.	2.73	Pc +
YOUR INTERESTS CHANGE RAPIDLY.	2.71	Pe -
YOU BELIEVE THAT A MAN SHOULD ACT AS PEOPLE EXPECT HIM TO INSTEAD OF INSISTING ON BEING HIMSELF ALL THE TIME.	2.72	Cv +
AT TIMES YOU HAVE THOUGHT A CROOK WAS SO CLEVER THAT YOU HAVE HOPED HE WOULD GET BY WITH IT.	2.72	SU +
YOU ARE EMBARRASSED IF YOU ARE SUDDENLY MADE THE CENTER OF ATTENTION IN A GROUP OF PEOPLE.	2.69	SN +

	P	FACTOR
YOU HAVE SOMETIMES HAD SUDDEN CHANGES IN MOODS WITHOUT A REASON.	2.68	Cd +
YOU LIKE TO BE BY YOURSELF A GREAT DEAL.	2.68	Gs -
YOU BELIEVE THAT THERE SHOULD BE GREATER FREEDOM IN REGARD TO DIVORCE.	2.65	Cv -
SOMETIMES WHEN YOU ARE NOT FEELING WELL YOU ARE CROSS.	2.64	Ho +
YOU HAVE NEVER LOST AN ARGUMENT.	2.63	Pc +
YOU HAVE DIFFICULTY STARTING A CONVERSATION WITH STRANGERS.	2.66	So -
YOU GET STAGE FRIGHT.	2.66	Sn +
YOU FIND IT DIFFICULT TO GET RID OF A SALESMAN.	2.59	Sc -
YOU ARE EASILY STARTLED AND DISTRACTED BY SUDDEN SOUNDS.	2.63	Ne +
YOU ARE TROUBLED BY USELESS STRAY THOUGHTS RUNNING THROUGH YOUR MIND.	2.60	Ne +
YOU GET TIRED QUICKLY.	2.59	E +
YOU HAVE MORE TROUBLE CONCENTRATING THAN OTHERS SEEM TO HAVE.	2.58	Pc +
IT IS MORE IMPORTANT THAT YOUR FRIENDS BE REFINED THAN IT IS THAT THEY BE GOOD COMPANY AND EASY TO GET ALONG WITH.	2.62	Cv -
YOU BELIEVE THAT THERE IS LITTLE POINT IN HAVING THINGS DONE JUST SO.	2.61	Me -
YOU ENJOY A RACE OR GAME BETTER WHEN YOU BET ON IT.	2.56	Mr +
YOU ARE UNHAPPY UNLESS THINGS GO PRETTY MUCH AS YOU WANT THEM TO.	2.55	A -
YOU OFTEN ACT ON THE FIRST THOUGHT THAT COMES INTO YOUR HEAD.	2.54	Mr +
YOU OFTEN FEEL LONESOME WHEN YOU ARE WITH OTHER PEOPLE.	2.50	ALAU -

	P	FACTOR
YOU FIND IT VERY DIFFICULT TO TAKE NO FOR AN ANSWER EVEN WHEN IT IS CLEARLY IMPOSSIBLE TO DO WHAT YOU WANT.	2.55	EI +
YOU HESITATE TO PUT YOUR ABILITIES TO THE TEST.	2.54	Sc -
YOU WOULD BE HAPPY IF YOU DIDN'T HAVE TO MAKE MANY SOCIAL CONTACTS.	2.51	Gs -
SOMETIMES YOU START TALKING WITHOUT KNOWING EXACTLY WHAT YOU ARE GOING TO SAY.	2.52	MP +
YOU COMPLAIN TO A WAITER OR THE MANAGER IF YOU ARE SERVED BAD FOOD IN A RESTAURANT.	2.50	Do +
YOU HAVE PERIODS WHEN YOU FEEL GROUCHY AND JUST DON'T WANT TO SEE ANYONE.	2.49	Cd +
YOU OFTEN SAY THINGS ON THE SPUR OF THE MOMENT AND THEN REGRET THEM.	2.52	MP +
YOU WOULD LIKE VERY MUCH TO WORK ALONE IN AN OUT-OF-THE-WAY PLACE.	2.48	Gs -
YOU COULD BECOME SO INTERESTED IN YOUR WORK THAT YOU WOULD NOT NOTICE A LACK OF CLOSE FRIENDS.	2.50	Ss +
YOUR FEELINGS CHANGE BETWEEN HAPPINESS AND SADNESS FOR NO REAL REASON.	2.45	Cd +
YOU SOMETIMES THINK THAT MOST PEOPLE ARE NOT AS KIND AND CONSIDERATE TO YOU AS YOU DESERVE.	2.46	EI +
YOU GET A LOT OF SATISFACTION WHEN YOU MAKE OTHER PEOPLE DO WHAT YOU WANT THEM TO.	2.46	A -
YOU DO MANY THINGS WHICH YOU ARE SORRY ABOUT LATER.	2.46	Pc +
IDEAS RUN THROUGH YOUR HEAD SO THAT YOU CANNOT SLEEP.	2.45	ALAU -
WHEN YOU COME TO A NEW PLACE YOU ARE SLOW AT MAKING NEW FRIENDS.	2.45	So -
YOU ARE A PERSON WHOSE FEELINGS ARE RATHER EASILY HURT.	2.44	E +

	P	FACTOR
YOU THINK YOU WOULD LIKE THE WORK OF A LIBRARIAN.	2.43	Mf -
IT IS DIFFICULT FOR YOU TO TALK ABOUT THINGS IN GENERAL WITH PEOPLE.	2.43	So -
YOU GET DISCOURAGED EASILY.	2.39	Sc -
YOU WOULD RATHER BE A TEACHER THAN AN ENGINEER.	2.39	Se +
YOU OFTEN HAVE SPELLS OF THE BLUES FOR NO GOOD REASON.	2.30	Cd +
YOU FEEL SORRY FOR YOURSELF WHEN THINGS GO WRONG.	2.31	E +
YOU ARE EASILY MOVED TO TEARS.	2.27	E +
YOU PAY LESS ATTENTION TO THINGS GOING ON AROUND YOU THAN MOST PEOPLE DO.	2.35	ALAU -
YOU USED TO KEEP A DIARY.	2.32	Mf -
YOU TEND TO GET OVER-EXCITED AND EASILY UPSET IN EXCITING SITUATIONS.	2.29	Ne +
YOU WOULD PREFER YOUR WIFE TO BE ADMIRER BY OTHERS THAN BE RELIGIOUS.	2.27	REIR -
YOU BELIEVE THAT CHURCHES SHOULD URGE PEOPLE TO THINK MORE OF THE GOOD OF OTHERS RATHER THAN GIVE SPIRITUAL WORSHIP TO GOD.	2.27	REIR -
YOU KEEP IN THE BACKGROUND ON SOCIAL OCCASIONS.	2.38	So -
BOOKS HAVE BEEN MORE ENTERTAINING TO YOU THAN COMPANIONS.	2.13	ALAU -
YOU SOMETIMES TRY TO ARGUE OR BLUFF YOUR WAY PAST A DOORMAN.	2.17	Do +
YOU TEND TO DAY-DREAM INSTEAD OF DOING YOUR WORK.	2.16	ALAU -
YOU HAVE MORE FUN TRAVELING ALONE THAN IN A GROUP.	2.22	Gs -

	P	FACTOR
TO YOU, IT IS BETTER TO STAY SINGLE THAN HAVE THE RESPONSIBILITY OF A FAMILY.	2.24	IF -
YOU BELIEVE THAT IT IS A WASTE OF TIME TO TRY TO KEEP EVERYTHING IN ITS PLACE ALL THE TIME.	2.20	ME -
YOU ARE A RATHER NERVOUS PERSON.	2.30	NE +
YOU FIND THAT YOUR MEMORY IS POOR AND LETS YOU DOWN WHEN YOU DON'T EXPECT IT TO.	2.33	Sc -
YOU ARE TROUBLED WITH SHYNESS.	2.31	So -
YOU TELL PEOPLE HOW GOOD YOU ARE WITHOUT FEELING IT NECESSARY TO WAIT UNTIL THEY ASK.	2.05	Do +
YOU LIKE TO GET A LOT OF ATTENTION.	2.12	EI +
LIFE IS A STRAIN FOR YOU MUCH OF THE TIME.	2.11	Pc +
WHEN THINGS DON'T GO YOUR WAY, YOU JUST CAN'T CONTROL YOURSELF.	2.03	EI +
YOU BELIEVE THAT SOMETIMES THE ONLY WAY TO GET THINGS DONE AT ALL IS BY VIOLENCE, RATHER THAN BY GRADUAL METHODS WHICH HARM NO ONE.	2.05	SE -
YOU LACK SELF-CONFIDENCE.	2.08	Sc -
YOU DO NOT ALWAYS TELL THE TRUTH.	2.04	Ho +
YOU BELIEVE THAT THE OPINIONS OF MOST PEOPLE ARE WORTHLESS.	1.96	A -
YOU ARE MORE ABSENTMINDED THAN THE AVERAGE PERSON.	1.89	ALAU -
YOU ARE NOT REALLY VERY INTERESTED IN RELIGION.	1.92	REIR -
YOU ARE QUARRELSOME.	1.84	EI +
YOU SOMETIMES TEASE ANIMALS.	1.83	MF +
YOU BELIEVE YOU ARE BEING PLOTTED AGAINST.	1.85	Pc +

	P	FACTOR
YOU HAVE OFTEN WISHED YOU WERE A GIRL.	1.57	MF -
YOU WOULD RATHER BE A "SMART-ALECK" AND GET ATTENTION THAN NOT BE NOTICED AT ALL.	1.53	EI +
THERE IS SOMETHING WRONG WITH YOUR MIND.	1.46	Pc +
YOU ARE AGREEABLE.	4.25	A +
YOU WANT AMERICA TO GET MORE PROTECTION AGAINST THE TERROR OF THE ATOM BOMB.	4.23	FE +
YOU ENJOY GETTING TO KNOW MOST PEOPLE.	4.20	So +
YOU ARE MORE ALERT TO WHAT IS AROUND YOU THAN THE AVERAGE PERSON.	4.09	ALAU +
YOU ARE OBEDIENT.	4.13	DE +
YOU WANT TO SEE THE DANGER OF DEATH BY ACCIDENTS AND DISEASE REDUCED.	4.14	FE +
YOU LIKE TO TAKE AN ACTIVE PART IN ATHLETICS AND TO GET EXERCISE.	4.12	IA +
YOU WANT TO BE ABLE TO DO MORE FOR CHILDREN ANYWHERE IN THE WORLD WHO ARE SICK, POOR, OR UNCARED FOR.	4.13	IF +
YOU ARE WILLING AND ABLE TO STICK AT A TASK.	4.10	PE +
YOU BELIEVE SOMETHING SHOULD BE DONE TO PUT A STOP TO THE INCREASE IN CRIME.	4.15	FE +
YOU STUDIED HARD AND COULD BE DEPENDED UPON TO DO YOUR SCHOOL WORK.	3.96	DE +
YOU ARE EQUAL TO ANY TASK.	3.98	EI +
YOU HAVE STRONG INTEREST IN ATHLETICS.	4.07	IA +
YOU LIKE TO BE WITH PEOPLE A GREAT DEAL.	3.82	Gs +
IN YOUR OPINION SCHOOLS SHOULD TRY TO GET PEOPLE TO TAKE MORE OF A PART IN ATHLETICS THAN THEY DO.	3.82	IA +

	P	FACTOR
YOU THINK THAT MOST PEOPLE COULD MAKE A SUCCESS OF THEIR LIVES IF THEY WOULD ONLY TRY AND NEVER GIVE UP.	3.83	Pe +
YOU ADMIRE GO-GETTERS.	3.69	Do +
YOU FREQUENTLY FIND YOURSELF JUST THINKING ABOUT LIFE.	3.40	IP +
ATHLETICS INTEREST YOU MORE THAN INTELLECTUAL AFFAIRS.	3.39	IA +
PEOPLE ARE MORE INTERESTING TO YOU THAN ANYTHING ELSE.	3.29	Gs +
ONCE IN A WHILE YOU LAUGH AT A DIRTY JOKE.	3.36	Ho +
YOU WANT TO HAVE THE DUTIES OF HEAD OF A FAMILY.	3.34	IF +
IT IS QUITE USUAL FOR YOU TO SPEND TIME THINKING ABOUT THE PURPOSE OF HUMAN LIFE.	3.27	IP +
YOU OFTEN HAVE UPS AND DOWNS IN MOOD, EITHER WITH OR WITHOUT A REASON.	2.82	Cd +
YOU ARE A FAIRLY HEADSTRONG PERSON AND FOLLOW YOUR OWN IDEAS REGARDLESS OF THE OPINIONS OF OTHERS.	2.82	Do +
YOU FEEL SELF-CONSCIOUS IN FRONT OF STRANGERS OR IN A LARGE CROWD.	2.84	SN +
YOU SOMETIMES HAVE A FEELING OF DREAD FOR NO APPARENT REASON.	2.57	ALAU -
YOU USUALLY PREFER TO WORK WITH OTHER PEOPLE.	3.67	Gs +
YOU BELIEVE THAT WHATEVER YOUR CHURCH SAYS IS RIGHT AND SHOULD BE SUPPORTED.	3.73	REIR +
YOU DO NOT GO ALONG WITH THE MODERN TENDENCY TO BE TOO CASUAL IN THE WAY YOU DRESS.	2.53	Cv +
YOU OFTEN HAVE DIFFICULTY IN THINKING OF THE RIGHT REMARK TO MAKE WHEN YOU ARE TALKING WITH A GROUP OF PEOPLE.	2.58	SN +

	P	FACTOR
YOU OFTEN FEEL JUST MISERABLE AND IN LOW SPIRITS FOR NO GOOD REASON.	2.30	Cd +
IF YOU COULD GET INTO A MOVIE WITHOUT PAYING AND BE SURE YOU WERE NOT SEEN, YOU WOULD PROBABLY DO IT.	2.27	Ho +
THE THOUGHT OF BEING A PARENT IS NOT VERY APPEALING TO YOU.	2.29	If -
YOU USUALLY FOLLOW INSTRUCTIONS AND DO WHAT IS EXPECTED OF YOU.	4.39	De +
YOU BELIEVE YOUR FATHER WAS A GOOD MAN.	4.44	Pc -
YOU WANT TO SEE RELIGION MAINTAIN OR INCREASE ITS INFLUENCE.	4.32	RelR +
YOU CAN RELY ON YOURSELF TO DO THE RIGHT THING.	4.18	De +
"A PLACE FOR EVERYTHING AND EVERYTHING IN ITS PLACE" DESCRIBES ONE OF YOUR HABITS VERY WELL.	4.18	Me +
YOU CAN TURN OUT A LOT OF WORK IN A SHORT TIME.	4.19	Su +
YOU COULD BE COUNTED ON TO HELP OUT AROUND SCHOOL OR IN THE CLASSROOM.	4.00	De +
YOU WANT MORE MONEY MADE AVAILABLE TO REDUCE THE DANGER OF DEATH BY CANCER.	4.04	Fe +
YOU BECOME VERY INTERESTED WHEN YOU WATCH ATHLETIC CONTESTS.	4.03	Ia +
WHEN MOST PEOPLE NEED HELP IN DOING SOMETHING, YOU SEEM TO GET ALONG WITHOUT IT.	3.74	Ei +
YOU WANT TO SEE ANY MILITARY POWER THAT THREATENS THE U.S.A. ATTACKED AND DESTROYED.	3.67	Fe +
YOU ARE SURE OF YOUR ABILITY TO MAKE THE RIGHT IMPRESSION ON PEOPLE.	3.71	Sn -
YOU DAY-DREAM FREQUENTLY.	2.37	Alau -
YOU DON'T WANT TO BE TIED DOWN TO THE RESPONSIBILITIES OF A FAMILY.	2.31	If -
YOU ARE OFTEN IN A STATE OF EXCITEMENT.	2.32	Ne +

APPENDIX B

THE MFFC PERSONALITY INVENTORY

MFFC
PERSONALITY INVENTORY

ONE OF THE TOUGHEST JOBS YOU CAN DO IS TO JUDGE YOURSELF. THIS JOB IS WHAT YOU ARE ASKED TO DO NOW.

IN THIS BOOKLET YOU WILL FIND MANY STATEMENTS ABOUT YOURSELF, SOME OF THEM ARE CLOSE TO THE TRUTH ABOUT YOU, OTHERS ARE NOT SO TRUE, AND STILL OTHERS WILL NOT APPLY TO YOU AT ALL.

THE STATEMENTS ARE DIVIDED INTO GROUPS OF THREE. THE THREE STATEMENTS OF EACH GROUP ARE LETTERED A, B, AND C. YOUR JOB IS TO:

1. READ CAREFULLY EACH GROUP OF STATEMENTS.
2. DECIDE WHICH OF THE THREE STATEMENTS IS MOST LIKE YOU.
3. DECIDE WHICH IS LEAST LIKE YOU.
4. MARK THE ANSWER SHEET.

HERE IS THE FIRST GROUP OF STATEMENTS:

- 1 A. YOU HAVE SOMETIMES HAD SUDDEN CHANGES
IN MOODS WITHOUT A REASON.
- B. YOU LIKE TO BE BY YOURSELF A GREAT DEAL.
- C. YOU GET STAGE FRIGHT.

AFTER HAVING CAREFULLY READ THE THREE STATEMENTS YOU NOW PICK THE ONE THAT IS MOST LIKE YOU AND THE ONE THAT IS LEAST LIKE YOU. NOW LOOK AT THE ANSWER SHEET FOR GROUP 1. MARK THE ANSWER SHEET BY BLACKING OUT THE M (FOR THE MOST LIKE YOU) NEXT TO THE LETTER THAT STANDS FOR YOUR CHOICE. NOW BLACK OUT THE L (FOR LEAST LIKE YOU) FOR THE STATEMENT YOU FEEL IS LEAST LIKE YOU. LEAVE UNMARKED THE M AND L OF THE STATEMENT THAT REMAINS.

IF YOU HAVE DONE THIS PROPERLY YOUR ANSWER SHOULD LOOK LIKE ONE OF THESE:

I A. ☐ L
B. ☒ M ☒
C. M L

I A. M L
B. ☒ L
C. M ☒

I A. M ☒
B. M L
C. ☒ L

I A. M ☒
B. ☒ L
C. M L

I A. M L
B. M ☒
C. ☒ L

IF YOU HAPPENED TO ANSWER THIS WAY →

I A. ☒ L
B. M L
C. M ☒

YOU ARE SAYING THAT STATEMENT A OF

GROUP I IS MOST LIKE YOU, WHILE

STATEMENT C IS LEAST LIKE YOU.

NOTICE THAT FOR EACH OF THE PROPERLY MARKED ANSWERS, ONE M IS BLACKED OUT, ONE L IS BLACKED OUT, AND ONE CHOICE IS LEFT BLANK.

ONE OF THE THINGS THAT WILL MAKE THIS A HARD JOB FOR YOU IS THE FACT THAT SOMETIMES YOU WILL FEEL THAT ALL THREE STATEMENTS ARE EQUALLY TRUE ABOUT YOU OR EQUALLY FALSE ABOUT YOU.

YOU SHOULD HOWEVER MAKE DECISIONS AMONG THEM. CHOOSE AMONG THEM EVEN IF YOU DO NOT FEEL SURE. MAKE ONLY TWO MARKS FOR EACH GROUP OF THREE; BLACK OUT ONE M AND ONE L.

MAKE NO MARKS IN THIS BOOKLET

- 2
 - A. YOU LIKE TO DISCUSS THE MORE SERIOUS QUESTIONS OF LIFE WITH YOUR FRIENDS.
 - B. YOU ARE PROBABLY MORE INTERESTED IN GIRLS THAN MOST FELLOWS ARE.
 - C. YOU DO MOST THINGS SLOWLY AND WITH MUCH THOUGHT.
- 3
 - A. WHEN MOST PEOPLE NEED HELP IN DOING SOMETHING, YOU SEEM TO GET ALONG WITHOUT IT.
 - B. YOU WANT TO SEE ANY MILITARY POWER THAT THREATENS THE U.S.A. ATTACKED AND DESTROYED.
 - C. YOU ARE SURE OF YOUR ABILITY TO MAKE THE RIGHT IMPRESSION ON PEOPLE.
- 4
 - A. YOU BELIEVE THAT THERE IS LITTLE POINT IN HAVING THINGS DONE JUST SO.
 - B. YOU FIND IT DIFFICULT TO GET RID OF A SALESMAN.
 - C. YOU OFTEN HAVE DIFFICULTY IN THINKING OF THE RIGHT REMARK TO MAKE WHEN YOU ARE TALKING WITH A GROUP OF PEOPLE.
- 5
 - A. YOU ARE UNHAPPY UNLESS THINGS GO PRETTY MUCH AS YOU WANT THEM TO.
 - B. YOU DO NOT GO ALONG WITH THE MODERN TENDENCY TO BE TOO CASUAL IN THE WAY YOU DRESS.
 - C. YOU OFTEN ACT ON THE FIRST THOUGHT THAT COMES INTO YOUR HEAD.
- 6
 - A. YOU DAY-DREAM FREQUENTLY.
 - B. YOU DON'T WANT TO BE TIED DOWN TO THE RESPONSIBILITIES OF A FAMILY.
 - C. YOU ARE OFTEN IN A STATE OF EXCITEMENT.
- 7
 - A. YOU SPEND MORE OF YOUR TIME ON SPORTS THAN THE AVERAGE PERSON.
 - B. YOU ARE ATTRACTED TO EVERY GOOD LOOKING GIRL YOU SEE.
 - C. YOU WANT A MORE PLEASING PERSONALITY.
- 8
 - A. YOU PREFER A BUDDY WHO IS PRACTICAL MINDED RATHER THAN ONE WHO IS SERIOUSLY INTERESTED IN THINKING OUT HIS ATTITUDE TO LIFE.
 - B. YOU WOULD LIKE A POSITION IN WHICH YOU CHANGED FROM ONE KIND OF TASK TO ANOTHER FREQUENTLY DURING THE DAY.
 - C. YOU FEEL SELF-CONFIDENT ABOUT YOUR ABILITY TO MAKE A SUCCESS OF YOUR LIFE.
- 9
 - A. ONCE IN A WHILE YOU LAUGH AT A DIRTY JOKE.
 - B. IN YOUR OPINION MEN ARE SUPERIOR TO WOMEN IN MOST WAYS.
 - C. YOU DO NOT MIND SELLING THINGS OR ASKING FOR MONEY FOR A CAUSE IN WHICH YOU ARE INTERESTED.
- 10
 - A. YOU HAVE PERIODS WHEN YOU FEEL GROUCHY AND JUST DON'T WANT TO SEE ANYONE.
 - B. YOU WOULD LIKE VERY MUCH TO WORK ALONE IN AN OUT-OF-THE-WAY PLACE.
 - C. YOU COULD BECOME SO INTERESTED IN YOUR WORK THAT YOU WOULD NOT NOTICE A LACK OF CLOSE FRIENDS.
- 11
 - A. YOU TALK IN A WAY WHICH MAKES YOU APPEAR BETTER THAN OTHER PEOPLE.
 - B. YOU ARE ATTRACTED TO EVERY GOOD LOOKING GIRL YOU SEE.
 - C. YOU USUALLY UNDERSTAND A PROBLEM BETTER BY THINKING IT OUT ALONE RATHER THAN BY TALKING IT OVER WITH OTHERS.
- 12
 - A. YOU HAVE A GOOD APPETITE.
 - B. YOU LIKE TO BE WITH PEOPLE A GREAT DEAL.
 - C. YOU REALLY FEEL BAD WHEN OTHER PEOPLE HAVE TOUGH LUCK.

- 13 A. IF A PERSON DOES NOT DO SOMETHING FOR YOU THAT HE WAS SUPPOSED TO YOU SPEAK TO HIM ABOUT IT.
- B. YOU SPEND MORE OF YOUR TIME ON SPORTS THAN THE AVERAGE PERSON.
- C. WHEN YOU GET BORED YOU LIKE TO STIR UP SOME EXCITEMENT.
- 14 A. YOU ARE A PERSON WHOSE FEELINGS ARE RATHER EASILY HURT.
- B. YOU THINK YOU WOULD LIKE THE WORK OF A LIBRARIAN.
- C. IT IS DIFFICULT FOR YOU TO TALK ABOUT THINGS IN GENERAL WITH PEOPLE.
- 15 A. IT IS IMPORTANT FOR YOU TO GET WHAT YOU WANT EVEN IF YOU HAVE TO FIGHT FOR IT.
- B. YOU DISLIKE HAVING A GROUP OF PEOPLE WATCHING YOU WORK.
- C. YOU USUALLY ENJOY SPENDING AN EVENING ALONE.
- 16 A. YOU COULD BE COUNTED ON TO HELP OUT AROUND SCHOOL OR IN THE CLASSROOM.
- B. YOU WANT MORE MONEY MADE AVAILABLE TO REDUCE THE DANGER OF DEATH BY CANCER.
- C. YOU BECOME VERY INTERESTED WHEN YOU WATCH ATHLETIC CONTESTS.
- 17 A. YOU ARE ALMOST NEVER BOTHERED BY PAINS OVER YOUR HEART OR CHEST.
- B. YOU ARE INTERESTED IN READING ABOUT GREAT RELIGIOUS FAITHS.
- C. YOU USUALLY FACE TROUBLES ALONE WITHOUT SEEKING HELP.
- 18 A. YOUR FEELINGS CHANGE BETWEEN HAPPINESS AND SADNESS FOR NO REAL REASON.
- B. YOU SOMETIMES THINK THAT MOST PEOPLE ARE NOT AS KIND AND CONSIDERATE TO YOU AS YOU DESERVE.
- C. WHEN YOU COME TO A NEW PLACE YOU ARE SLOW AT MAKING NEW FRIENDS.
- 19 A. YOU THINK THAT MOST PEOPLE COULD MAKE A SUCCESS OF THEIR LIVES IF THEY WOULD ONLY TRY AND NEVER GIVE UP.
- B. YOU REALLY FEEL BAD WHEN OTHER PEOPLE HAVE TOUGH LUCK.
- C. YOU FIND IT EASY TO MAKE UP YOUR OWN MIND.
- 20 A. YOU TELL PEOPLE HOW GOOD YOU ARE WITHOUT FEELING IT NECESSARY TO WAIT UNTIL THEY ASK.
- B. WHEN THINGS DON'T GO YOUR WAY, YOU JUST CAN'T CONTROL YOURSELF.
- C. YOU DO NOT ALWAYS TELL THE TRUTH.
- 21 A. YOU ADMIRE GO-GETTERS.
- B. YOU WANT TO SEE ANY MILITARY POWER THAT THREATENS THE U.S.A. ATTACKED AND DESTROYED.
- C. YOU LIKE TO GO TO PARTIES AND AFFAIRS WHERE THERE IS LOTS OF LOUD FUN.
- 22 A. YOU ARE AGREEABLE.
- B. YOU ARE DEPENDABLE.
- C. YOU WANT TO SEE RELIGION MAINTAIN OR INCREASE ITS INFLUENCE.

- 23 A. YOU WOULD RATHER WIN THAN LOSE IN A GAME.
- B. YOU WANT TO MAKE LOVE TO A GIRL YOU FIND BEAUTIFUL.
- C. YOU TAKE A BIG PART IN SOCIAL AFFAIRS AND ENTERTAINMENTS.

- 24 A. YOU OFTEN HAVE UPS AND DOWNS IN MOOD EITHER WITH OR WITHOUT A REASON.
- B. YOU ARE A FAIRLY STUBBORN PERSON AND FOLLOW YOUR OWN IDEAS REGARDLESS OF THE OPINIONS OF OTHERS.
- C. YOU BELIEVE IT IS MORE IMPORTANT TO MAKE MONEY THAN TO SPEND TIME THINKING ABOUT LIFE.

- 25 A. YOU ARE CONSIDERED TO BE A PRACTICAL PERSON.
- B. DURING THE PAST FEW YEARS YOU HAVE BEEN WELL MOST OF THE TIME.
- C. ANYTHING YOU DO MUST BE DONE PERFECTLY BEFORE YOU ARE SATISFIED.

- 26 A. YOU LIKE TO CHANGE FROM ONE TYPE OF WORK TO ANOTHER FREQUENTLY.
- B. YOU FEEL SELF-CONSCIOUS IN FRONT OF STRANGERS OR IN A LARGE CROWD.
- C. YOU WOULD RATHER WORK THINGS OUT IN YOUR OWN WAY THAN TO ACCEPT SUGGESTIONS FROM OTHERS.

- 27 A. YOU WOULD RATHER WIN THAN LOSE IN A GAME.
- B. YOU ARE SOFT-HEARTED.
- C. YOU ARE AN IMPORTANT PERSON.

- 28 A. YOU USUALLY FOLLOW INSTRUCTIONS AND DO WHAT IS EXPECTED OF YOU.
- B. YOU KEEP YOUR HEAD IN TIMES OF EXCITEMENT AND STRESS.
- C. THE WELFARE OF YOUR FAMILY COMES FIRST WITH YOU.

- 29 A. YOU CAN RELY ON YOURSELF TO DO THE RIGHT THING.
- B. "A PLACE FOR EVERYTHING AND EVERYTHING IN ITS PLACE" DESCRIBES ONE OF YOUR HABITS VERY WELL.
- C. YOU CAN TURN OUT A LOT OF WORK IN A SHORT TIME.

- 30 A. YOU GET A LOT OF SATISFACTION WHEN YOU MAKE OTHER PEOPLE DO WHAT YOU WANT THEM TO.
- B. YOUR FEELINGS CHANGE BETWEEN HAPPINESS AND SADNESS FOR NO REAL REASON.
- C. YOU DO MANY THINGS WHICH YOU ARE SORRY ABOUT LATER.

- 31 A. IF YOU COULD GET INTO A MOVIE WITHOUT PAYING AND BE SURE YOU WERE NOT SEEN, YOU WOULD PROBABLY DO IT.
- B. THE THOUGHT OF BEING A PARENT IS NOT VERY APPEALING TO YOU.
- C. YOU BELIEVE THAT CHURCHES SHOULD URGE PEOPLE TO THINK MORE OF THE GOOD OF OTHERS THAN GIVE SPIRITUAL WORSHIP TO GOD.

- 32 A. YOU ARE UNHAPPY UNLESS THINGS GO PRETTY MUCH AS YOU WANT THEM TO.
- B. YOU ENJOY A RACE OR GAME BETTER WHEN YOU BET ON IT.
- C. YOU FIND IT DIFFICULT TO GET RID OF A SALESMAN.

- 33 A. YOU SOMETIMES HAVE A FEELING OF DREAD FOR NO APPARENT REASON.
- B. IT IS MORE IMPORTANT THAT YOUR FRIENDS BE REFINED THAN IT IS THAT THEY BE GOOD COMPANY AND EASY TO GET ALONG WITH.
- C. YOU BELIEVE THAT THERE IS LITTLE POINT IN HAVING THINGS DONE JUST SO.
- 34 A. YOU KEEP YOUR PROMISES.
- B. YOU WANT YOUR PARENTS NEVER TO BE LACKING THE THINGS NECESSARY FOR COMFORTABLE LIVING.
- C. YOU ARE NEAT AND CLEAN IN YOUR PERSONAL APPEARANCE.
- 35 A. DURING THE PAST FEW YEARS YOU HAVE BEEN WELL MOST OF THE TIME.
- B. YOU ARE EQUAL TO ANY TASK.
- C. ANYTHING YOU DO MUST BE DONE PERFECTLY BEFORE YOU ARE SATISFIED.
- 36 A. YOU USUALLY FOLLOW INSTRUCTIONS AND DO WHAT IS EXPECTED OF YOU.
- B. YOU BELIEVE YOUR FATHER WAS A GOOD MAN.
- C. YOU WANT TO SEE RELIGION MAINTAIN OR INCREASE ITS INFLUENCE.
- 37 A. YOU SOMETIMES HAVE A FEELING OF DREAD FOR NO APPARENT REASON.
- B. YOU GET TIRED QUICKLY.
- C. YOU HAVE MORE TROUBLE CONCENTRATING THAN OTHERS SEEM TO HAVE.
- 38 A. YOU ARE COOPERATIVE.
- B. YOU KEEP YOUR HEAD IN TIMES OF EXCITEMENT AND STRESS.
- C. YOU BELIEVE YOUR FATHER WAS A GOOD MAN.
- 39 A. IF SOMEONE WORKING FOR YOU FAILED TO HAVE HIS WORK DONE ON TIME YOU'D GIVE HIM A PIECE OF YOUR MIND.
- B. YOU HAVE SOMETIMES FELT THAT DIFFICULTIES WERE PILING UP SO HIGH THAT YOU COULD NOT OVERCOME THEM.
- C. YOU USUALLY PREFER TO DO YOUR OWN PLANNING ALONE RATHER THAN WITH OTHERS.
- 40 A. YOU THINK THAT NEARLY ALL PEOPLE TRY TO DO THE RIGHT THING WHEN GIVEN A CHANCE.
- B. YOU USUALLY KEEP IN TOUCH WITH THINGS GOING ON AROUND YOU.
- C. YOU WANT TO TRAVEL AND EXPLORE UNKNOWN CORNERS OF THE EARTH.
- 41 A. YOU BELIEVE THAT MOST PEOPLE ARE OUT TO GET MORE THAN THEY GIVE.
- B. YOU FIND IT NECESSARY TO CHANGE YOUR POSITION OFTEN IF YOU HAVE TO SIT AND LISTEN TO A LONG-WINDED SPEAKER.
- C. MOST OF THE TIME YOU DON'T UNDERSTAND WHY PEOPLE ACT AS THEY DO.
- 42 A. YOU OFTEN HAVE UPS AND DOWNS IN MOOD, EITHER WITH OR WITHOUT A REASON.
- B. ONCE IN A WHILE YOU PUT OFF UNTIL TOMORROW WHAT YOU OUGHT TO DO TODAY.
- C. AT PERIODS YOUR MIND SEEMS TO WORK MORE SLOWLY THAN USUAL.
- 43 A. YOU CAN RELY ON YOURSELF TO DO THE RIGHT THING.
- B. YOU WANT AMERICA TO GET MORE PROTECTION AGAINST THE TERROR OF THE ATOM BOMB.
- C. YOU CAN TURN OUT A LOT OF WORK IN A SHORT TIME.

- 44 A. IT IS MORE IMPORTANT THAT YOUR FRIENDS BE REFINED THAN IT IS THAT THEY BE GOOD COMPANY AND EASY TO GET ALONG WITH.
- B. YOU ARE EASILY STARTLED AND DISTRACTED BY SUDDEN SOUNDS.
- C. YOU HAVE NEVER LOST AN ARGUMENT.
- 45 A. YOU OFTEN FEEL JUST MISERABLE AND IN LOW SPIRITS FOR NO GOOD REASON.
- B. IF YOU COULD GET INTO A MOVIE WITHOUT PAYING AND BE SURE YOU WERE NOT SEEN, YOU WOULD PROBABLY DO IT.
- C. THE THOUGHT OF BEING A PARENT IS NOT VERY APPEALING TO YOU.
- 46 A. YOU WANT TO KNOW MORE SCIENCE.
- B. YOU ARE PERFECTLY SATISFIED WITH YOURSELF.
- C. YOU USUALLY READ THE SPORTS SECTION FIRST IN THE NEWSPAPER.
- 47 A. YOU WANT A MORE PLEASING PERSONALITY.
- B. YOU USUALLY UNDERSTAND A PROBLEM BETTER BY THINKING IT OUT ALONE RATHER THAN BY TALKING IT OVER WITH OTHERS.
- C. WHEN YOU GET BORED YOU LIKE TO STIR UP SOME EXCITEMENT.
- 48 A. YOU ALWAYS TRY TO UNDERSTAND YOURSELF AND WHY YOU ACT AS YOU DO.
- B. YOUR FEELINGS ARE NOT EASILY HURT.
- C. YOU WOULD RATHER BE A FORESTER THAN A SCHOOL TEACHER.
- 49 A. YOU WANT TO TRAVEL AND EXPLORE UNKNOWN CORNERS OF THE EARTH.
- B. YOU LIKE MECHANICS MAGAZINES.
- C. YOU NEVER STOP SOMETHING ONCE YOU START IT.
- 50 A. YOU DON'T WANT TO BE TIED DOWN TO THE RESPONSIBILITIES OF A FAMILY.
- B. YOU USED TO KEEP A DIARY.
- C. YOU ARE OFTEN IN A STATE OF EXCITEMENT.
- 51 A. YOU ARE MORE ALERT TO WHAT IS AROUND YOU THAN THE AVERAGE PERSON.
- B. YOU ARE JUST AS HEALTHY AS MOST OF YOUR FRIENDS.
- C. YOU HAVE A STRONG INTEREST IN ATHLETICS.
- 52 A. YOU SOMETIMES HAVE A FEELING OF DREAD FOR NO APPARENT REASON.
- B. YOU DO NOT GO ALONG WITH THE MODERN TENDENCY TO BE TOO CASUAL IN THE WAY YOU DRESS.
- C. YOU OFTEN HAVE DIFFICULTY IN THINKING OF THE RIGHT REMARK TO MAKE WHEN YOU ARE TALKING WITH A GROUP OF PEOPLE.
- 53 A. YOU LIKE TO GO TO A GOOD MOVIE OR PLAY EVERY WEEK OR SO.
- B. WHEN YOU DO SOMETHING YOU DO IT COMPLETELY THAT IS, YOU DON'T OVERLOOK A THING.
- C. YOU ACCEPT SOCIAL INVITATIONS RATHER THAN STAY HOME ALONE.
- 54 A. YOUR HANDS AND FEET ARE USUALLY WARM ENOUGH.
- B. YOU DO MOST THINGS SLOWLY AND WITH MUCH THOUGHT.
- C. YOU WONDER IF YOU'LL BE SUCCESSFUL IN LIFE.
- 55 A. YOU ARE CONSIDERED TO BE A PRACTICAL PERSON.
- B. YOU ARE SELDOM LATE FOR WORK.
- C. YOU ARE EQUAL TO ANY TASK.

- 56 A. YOU BELIEVE THAT A MAN SHOULD ACT AS PEOPLE EXPECT HIM TO INSTEAD OF INSISTING ON BEING HIMSELF ALL THE TIME.
- B. YOU ARE EMBARRASSED IF YOU ARE SUDDENLY MADE THE CENTER OF ATTENTION IN A GROUP OF PEOPLE.
- C. AT TIMES YOU HAVE THOUGHT A CROOK WAS SO CLEVER THAT YOU HAVE HOPED HE WOULD GET BY WITH IT.
- 57 A. YOU LIKE TO GO TO A GOOD MOVIE OR PLAY EVERY WEEK OR SO.
- B. YOU USUALLY PLAN OUT YOUR WORK CAREFULLY BEFORE YOU BEGIN IT.
- C. YOU HAVE VERY FEW ARGUMENTS WITH MEMBERS OF YOUR FAMILY.
- 58 A. YOU BELIEVE THAT SOMETHING SHOULD BE DONE ABOUT THE DANGER OF UNEMPLOYMENT AS A RESULT OF THE TENDENCY TO REPLACE MEN WITH MACHINES.
- B. YOU WOULD RATHER WIN THAN LOSE IN A GAME.
- C. YOU ALWAYS TRY TO UNDERSTAND YOURSELF AND WHY YOU ACT AS YOU DO.
- 59 A. YOU HAVE A STRONG SEX DRIVE.
- B. YOU FEEL SELF-CONSCIOUS WHEN YOU RECITE IN CLASS.
- C. YOU NEVER WORRY ABOUT YOUR LOOKS.
- 60 A. YOU HAVE SOME TRAIT IN WHICH YOU FEEL SUPERIOR TO MOST PEOPLE.
- B. PEOPLE OFTEN DISAPPOINT YOU.
- C. YOUR INTERESTS CHANGE RAPIDLY.
- 61 A. YOU OFTEN HAVE UPS AND DOWNS IN MOOD, EITHER WITH OR WITHOUT A REASON.
- B. YOU ARE A FAIRLY HEADSTRONG PERSON AND FOLLOW YOUR OWN IDEAS REGARDLESS OF THE OPINIONS OF OTHERS.
- C. YOU FEEL SELF-CONSCIOUS IN FRONT OF STRANGERS OR IN A LARGE CROWD.
- 62 A. YOU WANT MORE MONEY MADE AVAILABLE TO REDUCE THE DANGER OF DEATH BY CANCER.
- B. YOU BECOME VERY INTERESTED WHEN YOU WATCH ATHLETIC CONTESTS.
- C. YOU ARE A RELIGIOUS PERSON.
- 63 A. YOU PAY LESS ATTENTION TO THINGS GOING ON AROUND YOU THAN MOST PEOPLE DO.
- B. YOU GET DISCOURAGED EASILY.
- C. YOU WOULD RATHER BE A TEACHER THAN AN ENGINEER.
- 64 A. YOU HAVE MORE FUN TRAVELING ALONE THAN IN A GROUP.
- B. TO YOU, IT IS BETTER TO STAY SINGLE THAN HAVE THE RESPONSIBILITY OF A FAMILY.
- C. YOU BELIEVE THAT IT IS A WASTE OF TIME TO TRY TO KEEP EVERYTHING IN ITS PLACE ALL THE TIME.
- 65 A. YOU GET ANGRY SOMETIMES.
- B. YOU MAKE DECISIONS ON THE SPUR OF THE MOMENT.
- C. YOU LIKE TO SPEAK IN PUBLIC.

66 A. ONCE IN A WHILE YOU PUT OFF UNTIL TOMORROW WHAT YOU OUGHT TO DO TODAY.

B. YOU ARE EASILY DISTURBED BY DISTRACTIONS WHILE DOING MENTAL WORK.

C. YOU SWEAT VERY EASILY EVEN ON COOL DAYS.

67 A. YOU HAVE NEVER LOST AN ARGUMENT.

B. YOU GET STAGE FRIGHT.

C. YOU HAVE DIFFICULTY STARTING A CONVERSATION WITH STRANGERS.

68 A. PEOPLE ARE MORE INTERESTING TO YOU THAN ANYTHING ELSE.

B. YOU WANT TO HAVE THE DUTIES OF HEAD OF A FAMILY.

C. IT IS QUITE USUAL FOR YOU TO SPEND TIME THINKING ABOUT THE PURPOSE OF HUMAN LIFE.

69 A. YOU WANT TO BE SMARTLY DRESSED WITH A PERSONAL APPEARANCE THAT OTHERS MUST ADMIRE.

B. YOU LIKE TO BE WITH PEOPLE A GREAT DEAL.

C. IN YOUR OPINION SCHOOLS SHOULD TRY TO GET PEOPLE TO TAKE MORE OF A PART IN ATHLETICS THAN THEY DO.

70 A. YOU LIKE TO GET A LOT OF ATTENTION.

B. LIFE IS A STRAIN FOR YOU MUCH OF THE TIME.

C. YOU LACK SELF-CONFIDENCE.

71 A. YOU ARE QUARRELSOME.

B. YOU SOMETIMES TEASE ANIMALS.

C. YOU BELIEVE YOU ARE BEING PLOTTED AGAINST.

72 A. YOU STUDIED HARD AND COULD BE DEPENDED UPON TO DO YOUR SCHOOL WORK.

B. DURING THE PAST FEW YEARS YOU HAVE BEEN WELL MOST OF THE TIME.

C. YOU THINK IT IS VALUABLE FOR A PERSON TO HAVE STRONG WILL-POWER.

73 A. YOU ARE INTERESTED IN SERIOUS PROBLEMS OF LIFE AND LIKE TO HAVE LONG DISCUSSIONS ON THEM WITH YOUR FRIENDS.

B. ONCE YOU START CONCENTRATING IT TAKES A LOT TO DISTURB YOU.

C. YOU ARE INTERESTED IN READING ABOUT GREAT RELIGIOUS FAITHS.

74 A. YOU ARE EASILY MOVED TO TEARS.

B. YOU TEND TO GET OVER-EXCITED AND EASILY UPSET IN EXCITING SITUATIONS.

C. YOU WOULD PREFER YOUR WIFE TO BE ADMIRER BY OTHERS RATHER THAN BE RELIGIOUS.

75 A. YOU CAN STAND CRITICISM WITHOUT BEING HURT.

B. YOU USUALLY PLAN SOMETHING OUT BEFORE YOU START TO DO IT.

C. YOU NEVER STOP SOMETHING ONCE YOU START IT.

76 A. YOU WANT TO SEE THE DANGER OF DEATH BY ACCIDENTS AND DISEASE REDUCED.

B. YOU LIKE TO TAKE AN ACTIVE PART IN ATHLETICS AND TO GET EXERCISE.

C. YOU WANT TO BE ABLE TO DO MORE FOR CHILDREN ANYWHERE IN THE WORLD WHO ARE SICK, POOR, OR UNCARED FOR.

- 77 A. YOU ALWAYS TRY TO UNDERSTAND YOURSELF AND WHY YOU ACT AS YOU DO.
- B. YOU TAKE A BIG PART IN SOCIAL AFFAIRS AND ENTERTAINMENTS.
- C. YOU ARE AN IMPORTANT PERSON.
- 78 A. ONE IN A WHILE YOU LAUGH AT A DIRTY JOKE.
- B. ATHLETICS INTEREST YOU MORE THAN INTELLECTUAL AFFAIRS.
- C. YOU FREQUENTLY FIND YOURSELF JUST THINKING ABOUT LIFE.
- 79 A. YOU SELDOM WORRY OVER POSSIBLE MISFORTUNES.
- B. YOU ARE ATTRACTED TO EVERY GOOD LOOKING GIRL YOU SEE.
- C. WHEN YOU GET BORED YOU LIKE TO STIR UP SOME EXCITEMENT.
- 80 A. YOU ADMIRE GO-GETTERS.
- B. YOU USUALLY PREFER TO WORK WITH OTHER PEOPLE.
- C. YOU ARE QUICK IN YOUR ACTIONS.
- 81 A. YOU BELIEVE THAT THERE SHOULD BE GREATER FREEDOM IN REGARD TO DIVORCE.
- B. SOMETIMES WHEN YOU ARE NOT FEELING WELL YOU ARE CROSS.
- C. YOU HAVE DIFFICULTY STARTING A CONVERSATION WITH STRANGERS.
- 82 A. YOU WANT TO SEE SOMETHING DONE ABOUT ALL THOSE PEOPLE WHO ARE PUTTING THIS COUNTRY IN DANGER BY GIVING AWAY OUR SECRETS.
- B. "A PLACE FOR EVERYTHING AND EVERYTHING IN ITS PLACE" DESCRIBES ONE OF YOUR HABITS VERY WELL.
- C. YOU STOP AND THINK THINGS OVER BEFORE DOING SOMETHING.
- 83 A. YOU THINK THAT MOST PEOPLE KNOW WHAT TO DO WITHOUT BEING TOLD.
- B. YOU WANT TO HAVE THE DUTIES OF HEAD OF A FAMILY.
- C. WHEN YOU HAVE TO MAKE A DECISION IN A HURRY YOU PREFER MAKING IT ALONE.
- 84 A. YOU OFTEN HAVE SPELLS OF THE BLUES FOR NO GOOD REASON.
- B. YOU FEEL SORRY FOR YOURSELF WHEN THINGS GO WRONG.
- C. YOU ARE A RATHER NERVOUS PERSON.
- 85 A. YOU ADMIRE GO-GETTERS.
- B. YOU USUALLY PREFER TO WORK WITH OTHER PEOPLE.
- C. YOU BELIEVE THAT WHATEVER YOUR CHURCH SAYS IS RIGHT AND SHOULD BE SUPPORTED.
- 86 A. YOU BELIEVE IT IS MORE IMPORTANT TO MAKE MONEY THAN TO SPEND TIME THINKING ABOUT LIFE.
- B. YOU LIKE TO TALK ABOUT SEX.
- C. YOU USUALLY PREFER TO DO YOUR OWN PLANNING ALONE RATHER THAN WITH OTHERS.
- 87 A. YOU DO NOT GO ALONG WITH THE MODERN TENDENCY TO BE TOO CASUAL IN THE WAY YOU DRESS.
- B. YOU WOULD BE HAPPY IF YOU DIDN'T HAVE TO MAKE MANY SOCIAL CONTACTS.
- C. SOMETIMES YOU START TALKING WITHOUT KNOWING EXACTLY WHAT YOU ARE GOING TO SAY.
- 88 A. YOU WANT TO KNOW MORE SCIENCE.
- B. ATHLETICS INTEREST YOU MORE THAN INTELLECTUAL AFFAIRS.
- C. YOU FREQUENTLY FIND YOURSELF JUST THINKING ABOUT LIFE.

- 89 A. YOU LIKE TO TAKE AN ACTIVE PART IN ATHLETICS AND TO GET EXERCISE.
- B. YOU ARE ORDERLY.
- C. YOU USUALLY GET OUT OF DIFFICULT SITUATIONS WITHOUT HELP.
- 90 A. YOU LIKE MECHANICS MAGAZINES.
- B. YOU BELIEVE THAT WHATEVER YOUR CHURCH SAYS IS RIGHT AND SHOULD BE SUPPORTED.
- C. YOU ARE SELF-CONFIDENT ABOUT YOUR ABILITIES.
- 91 A. YOU CAN RELY ON YOURSELF TO DO THE RIGHT THING.
- B. YOU STOP AND THINK THINGS OVER BEFORE DOING SOMETHING.
- C. YOU CAN TURN OUT A LOT OF WORK IN A SHORT TIME.
- 92 A. YOU BELIEVE SOMETHING SHOULD BE DONE TO PUT A STOP TO THE INCREASE IN CRIME.
- B. YOU BELIEVE THAT SUNDAY SHOULD BE MORE STRICTLY OBSERVED AS A DAY OF REST AND CHURCHGOING.
- C. YOU USUALLY GET OUT OF DIFFICULT SITUATIONS WITHOUT HELP.
- 93 A. YOU BELIEVE THAT THERE IS LITTLE POINT IN HAVING THINGS DONE JUST SO.
- B. YOU ARE TROUBLED BY USELESS STRAY THOUGHTS RUNNING THROUGH YOUR MIND.
- C. YOU OFTEN HAVE DIFFICULTY IN THINKING OF THE RIGHT REMARK TO MAKE WHEN YOU ARE TALKING WITH A GROUP OF PEOPLE.
- 94 A. YOUR MOODS CHANGE VERY LITTLE.
- B. ONCE YOU START CONCENTRATING, IT TAKES A LOT TO DISTURB YOU.
- C. YOU LIKE TO ENTERTAIN GUESTS.
- 95 A. YOU LIKE TO BE WITH PEOPLE A GREAT DEAL.
- B. IN YOUR OPINION SCHOOLS SHOULD TRY TO GET PEOPLE TO TAKE MORE OF A PART IN ATHLETICS THAN THEY DO.
- C. YOU THINK THAT MOST PEOPLE COULD MAKE A SUCCESS OF THEIR LIVES IF THEY WOULD ONLY TRY AND NEVER GIVE UP.
- 96 A. YOU ARE SELF-CONFIDENT ABOUT YOUR ABILITIES.
- B. IF YOU WERE A BOSS ON A JOB, YOU WOULD FIND IT HARD TO LAY OFF MEN WHEN THE WORK IS SHORT.
- C. YOU ARE SURE OF YOUR ABILITY TO MAKE THE RIGHT IMPRESSION ON PEOPLE.
- 97 A. YOU SOMETIMES MAKE QUICK DECISIONS THAT YOU LATER WISH YOU HADN'T MADE.
- B. AT PERIODS YOUR MIND SEEMS TO WORK MORE SLOWLY THAN USUAL.
- C. YOU USUALLY PREFER TO DO YOUR OWN PLANNING ALONE RATHER THAN WITH OTHERS.
- 98 A. YOU ARE EASILY AWAKENED BY NOISE.
- B. YOU DO NOT LIKE EVERYONE YOU KNOW.
- C. YOU FEEL EMBARRASSED WHEN YOU HAVE TO ENTER A PUBLIC ASSEMBLY AFTER EVERYONE ELSE HAS BEEN SEATED.
- 99 A. YOU STUDIED HARD AND COULD BE DEPENDED UPON TO DO YOUR SCHOOL WORK.
- B. YOU ARE EQUAL TO ANY TASK.
- C. YOU HAVE A STRONG INTEREST IN ATHLETICS.

- 100 A. YOU USUALLY KEEP IN TOUCH WITH THINGS GOING ON AROUND YOU.
B. YOU LIKE MECHANICS MAGAZINES.
C. YOU USUALLY PLAN SOMETHING OUT BEFORE YOU START TO DO IT.
- 101 A. YOU OFTEN FEEL JUST MISERABLE AND IN LOW SPIRITS FOR NO GOOD REASON.
B. YOU DON'T WANT TO BE TIED DOWN TO THE RESPONSIBILITIES OF A FAMILY.
C. YOU FIND THAT YOUR MEMORY IS POOR AND LETS YOU DOWN WHEN YOU DON'T EXPECT IT TO.
- 102 A. YOU USUALLY PREFER TO WORK WITH OTHER PEOPLE.
B. YOU LIKE TO GO TO PARTIES AND AFFAIRS WHERE THERE IS LOTS OF LOUD FUN.
C. YOU ARE QUICK IN YOUR ACTIONS.
- 103 A. YOU BELIEVE THAT MOST PEOPLE ARE OUT TO GET MORE THAN THEY GIVE.
B. YOU BELIEVE THAT ATTACK IS PROBABLY THE BEST DEFENSE.
C. YOU STUDY CAREFULLY THE REASONS PEOPLE ACT AS THEY DO.
- 104 A. YOU TELL PEOPLE HOW GOOD YOU ARE WITHOUT FEELING IT NECESSARY TO WAIT UNTIL THEY ASK.
B. WHEN THINGS DON'T GO YOUR WAY, YOU JUST CAN'T CONTROL YOURSELF.
C. YOU BELIEVE THAT SOMETIMES THE ONLY WAY TO GET THINGS DONE AT ALL IS BY VIOLENCE, RATHER THAN BY GRADUAL METHODS WHICH HARM NO ONE.
- 105 A. YOU ARE MORE ALERT TO WHAT IS AROUND YOU THAN THE AVERAGE PERSON.
B. YOU BELIEVE SOMETHING SHOULD BE DONE TO PUT A STOP TO THE INCREASE IN CRIME.
C. YOU ARE WILLING AND ABLE TO STICK AT A TASK.
- 106 A. YOU ENJOY BEING IN LARGE GATHERINGS SUCH AS PARTIES OR DANCES.
B. YOU TEND TO BE VERY CAREFUL ABOUT DETAILS.
C. YOU HAVE VERY FEW ARGUMENTS WITH MEMBERS OF YOUR FAMILY.
- 107 A. IF A PERSON DOES NOT DO SOMETHING FOR YOU THAT HE WAS SUPPOSED TO YOU SPEAK TO HIM ABOUT IT.
B. YOU WANT A MORE PLEASING PERSONALITY.
C. YOU ARE INCLINED TO RUSH FROM ONE ACTIVITY TO ANOTHER WITHOUT STOPPING FOR REST.
- 108 A. IDEAS RUN THROUGH YOUR HEAD SO THAT YOU CANNOT SLEEP.
B. YOU SOMETIMES THINK THAT MOST PEOPLE ARE NOT AS KIND AND CONSIDERATE TO YOU AS YOU DESERVE.
C. WHEN YOU COME TO A NEW PLACE YOU ARE SLOW AT MAKING NEW FRIENDS.
- 109 A. YOU ARE INTERESTED IN SERIOUS PROBLEMS OF LIFE AND LIKE TO HAVE LONG DISCUSSIONS ON THEM WITH YOUR FRIENDS.
B. YOU ALWAYS PREFER THE TYPE OF JOB THAT OFFERS CONSTANT CHANGE, TRAVEL AND VARIETY.
C. YOU WOULD LIKE TO BE IN A JOB WHERE YOU COULD HELP PEOPLE IN THEIR PERSONAL PROBLEMS.

110 A. YOU OFTEN FEEL LONESOME WHEN YOU ARE WITH OTHER PEOPLE.

B. YOU HAVE PERIODS WHEN YOU FEEL GROUCHY AND JUST DON'T WANT TO SEE ANYONE.

C. YOU COULD BECOME SO INTERESTED IN YOUR WORK THAT YOU WOULD NOT NOTICE A LACK OF CLOSE FRIENDS.

111 A. YOU USUALLY FEEL THAT LIFE IS WORTH WHILE.

B. YOU BELIEVE THAT SOMETHING SHOULD BE DONE TO CUT DOWN THE NUMBER OF TRAFFIC DEATHS.

C. YOU ENJOY GETTING TO KNOW MOST PEOPLE.

112 A. YOU ARE CONSIDERED TO BE A PRACTICAL PERSON.

B. YOU DO NOT EASILY GIVE UP TASKS IF YOU RUN INTO DIFFICULTIES.

C. YOU ARE A RELIGIOUS PERSON.

113 A. YOU LIKE TO TAKE AN ACTIVE PART IN ATHLETICS AND TO GET EXERCISE.

B. YOU WANT TO BE ABLE TO DO MORE FOR CHILDREN ANYWHERE IN THE WORLD WHO ARE SICK, POOR, OR UNCARED FOR.

C. YOU ARE WILLING AND ABLE TO STICK AT A TASK.

114 A. YOU BELIEVE THAT MOST PEOPLE DO WHAT THEY ARE SUPPOSED TO EVEN WHEN THEY ARE NOT WATCHED.

B. YOU LIKE TO DISCUSS THE MORE SERIOUS QUESTIONS OF LIFE WITH YOUR FRIENDS.

C. YOU ARE PROBABLY MORE INTERESTED IN GIRLS THAN MOST FELLOWS ARE.

115 A. YOU ARE A RATHER NERVOUS PERSON.

B. YOU FIND THAT YOUR MEMORY IS POOR AND LETS YOU DOWN WHEN YOU DON'T EXPECT IT TO.

C. YOU ARE TROUBLED WITH SHYNESS.

116 A. PEOPLE ARE MORE INTERESTING TO YOU THAN ANYTHING ELSE.

B. IT IS QUITE USUAL FOR YOU TO SPEND TIME THINKING ABOUT THE PURPOSE OF HUMAN LIFE.

C. YOU FEEL SELF-CONFIDENT ABOUT YOUR ABILITY TO MAKE A SUCCESS OF YOUR LIFE.

117 A. YOU ARE MORE ALERT TO WHAT IS AROUND YOU THAN THE AVERAGE PERSON.

B. YOU ARE OBEDIENT.

C. YOU WANT TO SEE THE DANGER OF DEATH BY ACCIDENTS AND DISEASE REDUCED.

118 A. YOU SELDOM WORRY OVER POSSIBLE MISFORTUNES.

B. YOU FIND IT NECESSARY TO CHANGE YOUR POSITION OFTEN IF YOU HAVE TO SIT AND LISTEN TO A LONG-WINDED SPEAKER.

C. MOST OF THE TIME YOU DON'T UNDERSTAND WHY PEOPLE ACT AS THEY DO.

119 A. YOU ARE INTERESTED IN READING ABOUT GREAT RELIGIOUS FAITHS.

B. YOU WOULD LIKE TO BE IN A JOB WHERE YOU COULD HELP PEOPLE IN THEIR PERSONAL PROBLEMS.

C. YOU LIKE TO ENTERTAIN GUESTS.

- 120 A. IF ANYONE STEPS AHEAD OF YOU IN A LINE HE IS LIKELY TO HEAR FROM YOU ABOUT IT.
- B. YOU LIKE TO KNOW SOME IMPORTANT PEOPLE BECAUSE IT MAKES YOU FEEL IMPORTANT.
- C. YOU LIKE TO TALK ABOUT SEX.

- 121 A. YOU ARE AGREEABLE.
- B. YOU WANT AMERICA TO GET MORE PROTECTION AGAINST THE TERROR OF THE ATOM BOMB.
- C. YOU ENJOY GETTING TO KNOW MOST PEOPLE.

- 122 A. YOU WANT TO BE SMARTLY DRESSED, WITH A PERSONAL APPEARANCE THAT OTHERS MUST ADMIRE.
- B. YOU REALLY FEEL BAD WHEN OTHER PEOPLE HAVE TOUGH LUCK.
- C. YOU FIND IT EASY TO MAKE UP YOUR OWN MIND.

- 123 A. YOU BELIEVE THAT THE OPINIONS OF MOST PEOPLE ARE WORTHLESS.
- B. YOU ARE MORE ABSENT-MINDED THAN THE AVERAGE PERSON.
- C. YOU ARE NOT REALLY VERY INTERESTED IN RELIGION.

- 124 A. YOU USUALLY PREFER TO WORK WITH OTHER PEOPLE.
- B. YOU BELIEVE THAT WHATEVER YOUR CHURCH SAYS IS RIGHT AND SHOULD BE SUPPORTED.
- C. IF YOU WERE A BOSS ON A JOB, YOU WOULD FIND IT HARD TO LAY OFF MEN WHEN THE WORK IS SHORT.

- 125 A. YOU FIND IT VERY DIFFICULT TO TAKE NO FOR AN ANSWER EVEN WHEN IT IS CLEARLY IMPOSSIBLE TO DO WHAT YOU WANT.
- B. YOU OFTEN ACT ON THE FIRST THOUGHT THAT COMES INTO YOUR HEAD.
- C. YOU HESITATE TO PUT YOUR ABILITIES TO THE TEST.

- 126 A. YOU ENJOY BEING IN LARGE GATHERINGS SUCH AS PARTIES OR DANCES.
- B. YOU LIKE TO GO TO A GOOD MOVIE OR PLAY EVERY WEEK OR SO.
- C. YOU ACCEPT SOCIAL INVITATIONS RATHER THAN STAY HOME ALONE.

- 127 A. YOU USED TO KEEP A DIARY.
- B. YOU ARE OFTEN IN A STATE OF EXCITEMENT.
- C. YOU ARE TROUBLED WITH SHYNESS.

- 128 A. WHEN YOU WRITE A REPORT, YOU RE-READ IT MANY TIMES TO MAKE SURE IT IS FREE OF ERRORS.
- B. YOU USUALLY PLAN OUT YOUR WORK CAREFULLY BEFORE YOU BEGIN IT.
- C. YOU SUCCEED IN KEEPING YOUR EMOTIONS OF WHATEVER KIND, UNDER VERY GOOD CONTROL.

- 129 A. YOU ARE OBEDIENT.
- B. YOU ARE ORDERLY.
- C. YOU ARE WILLING AND ABLE TO STICK AT A TASK.

- 130 A. YOU OFTEN FEEL LONESOME WHEN YOU
ARE WITH OTHER PEOPLE.
- B. YOU COMPLAIN TO A WAITER OR THE
MANAGER IF YOU ARE SERVED BAD FOOD
IN A RESTAURANT.
- C. YOU OFTEN SAY THINGS ON THE SPUR
OF THE MOMENT AND THEN REGRET THEM.
- 131 A. YOU WANT TO HAVE THE DUTIES OF HEAD
OF A FAMILY.
- B. IN YOUR OPINION MEN ARE SUPERIOR
TO WOMEN IN MOST WAYS.
- C. YOU DO NOT MIND SELLING THINGS OR
ASKING FOR MONEY FOR A CAUSE IN
WHICH YOU ARE INTERESTED.
- 132 A. YOU HAVE RECEIVED ALL THE REWARDS
IN LIFE THAT YOU DESERVE.
- B. IT MAKES YOU FEEL BETTER WHEN SOME-
BODY SYMPATHIZES WITH YOU.
- C. IN YOUR OPINION, GIRLS' EDUCATION
SHOULD CONSIST MAINLY OF THINGS THAT
ARE USEFUL AROUND THE HOUSE.

APPENDIX C

ADMINISTRATIVE DIRECTIONS
FIRST AND SECOND SESSIONS

ADMINISTRATIVE DIRECTIONS -- FIRST SESSION

(BEFORE THE FIRST SESSION PLACE A COPY OF THE JOB ADJUSTMENT INVENTORY TOGETHER WITH AN ANSWER SHEET, FACE DOWN AT EACH AVAILABLE SPACE. ALSO DISTRIBUTE THE PENCILS AT THIS TIME. BEFORE ROLL CALL SAY:)

DO NOT TURN OVER THE FORMS WHICH ARE IN FRONT OF YOU UNTIL YOU ARE TOLD TO DO SO.

(AFTER MUSTER HAS BEEN COMPLETED SAY:)

YOU ARE HERE TODAY TO ANSWER A FEW QUESTIONS ABOUT YOUR LIFE IN THE NAVY. PSYCHOLOGICAL RESEARCH ASSOCIATES, A CIVILIAN RESEARCH GROUP, HAS BEEN ASKED BY THE NAVY TO FIND OUT HOW ITS MEN FEEL ABOUT THEIR DUTIES.

THESE ARE NOT TESTS THAT YOU WILL TAKE TODAY. THAT IS, THERE ARE NO RIGHT OR WRONG ANSWERS. WHATEVER YOUR ANSWER IS, IT WILL BE THE CORRECT ANSWER FOR YOU. YOUR ANSWERS WILL BE SENT TO PSYCHOLOGICAL RESEARCH ASSOCIATES AND WILL BE KEPT CONFIDENTIAL. NO SCORES OR REMARKS OF ANY KIND WILL BE PLACED ON YOUR RECORD.

WHEN YOU ARE ASKED TO GIVE OPINIONS ABOUT YOURSELF, DO NOT LET WHAT YOU HAVE HEARD OTHER PEOPLE SAY INFLUENCE WHAT YOU YOURSELF REALLY THINK. IN OTHER WORDS, YOUR OPINION IS THE ONE WE WANT. REMEMBER, THERE ARE NO RIGHT OR WRONG ANSWERS.

IF YOU HAVE ANY QUESTIONS AT ANY TIME, RAISE YOUR HAND.

ON ALL THE FORMS YOU ARE TO FILL OUT TODAY, USE ONLY THE SPECIAL PENCIL WHICH HAS BEEN PROVIDED FOR YOU. IF YOU DO NOT HAVE A PENCIL, RAISE YOUR HAND NOW.

(PAUSE)

NOW TURN OVER THE SINGLE WHITE SHEET THAT IS IN FRONT OF YOU. THIS IS AN ANSWER SHEET. ON ONE SIDE OF THIS ANSWER SHEET YOU WILL SEE A SPACE FOR YOUR

NAME. PRINT, DO NOT WRITE, BUT PRINT YOUR NAME IN CAPITAL LETTERS THERE,
PUTTING YOUR LAST NAME FIRST, THEN YOUR FIRST NAME, AND THEN YOUR MIDDLE INITIAL.

(PAUSE)

IN THE SPACE MARKED "DATE" PUT DOWN YOUR DATE OF ENLISTMENT INTO THE NAVY,
WRITE THE DAY, MONTH AND YEAR IN THAT ORDER.

(PAUSE)

NOW IN THE SPACE MARKED "SCHOOL" PUT THE NAME OF THE TRAINING STATION, OR
BOOT CAMP, YOU ATTENDED WHEN YOU FIRST ENTERED THE NAVY.

(PAUSE)

IN THE SPACE MARKED "CITY" WRITE (SHIP'S NAME)

(PAUSE)

IN THE SPACE MARKED "NUMBER 1", DIRECTLY UNDER THE WORD "SCHOOL" PUT YOUR
PRESENT RATE.

(PAUSE)

IN SPACE NUMBER 2 WRITE IN YOUR SERIAL NUMBER.

DO NOT FILL IN THE REST OF THE SPACES.

(PAUSE)

HAS EVERYONE FINISHED?

(PAUSE)

ALL RIGHT, NOW TURN OVER THE OTHER FORM THAT IS IN FRONT OF YOU AND READ
THE DIRECTIONS TO YOURSELF AS I READ THEM TO YOU.

(PAUSE)

ON THE FOLLOWING PAGES THERE ARE STATEMENTS ABOUT THE NAVY. YOU ARE TO READ
EACH STATEMENT CAREFULLY AND DECIDE WHETHER YOU AGREE OR DISAGREE WITH IT; THAT
IS, YOU ARE TO DECIDE IF YOU THINK THE STATEMENT IS TRUE OR FALSE AS FAR AS YOU
ARE CONCERNED.

PUT YOUR ANSWERS ON THE ANSWER SHEET. Do Not MAKE MARKS IN THIS BOOKLET.

NOW LOOK AT THE ANSWER SHEET. AFTER EACH NUMBER ON THE ANSWER SHEET THERE ARE FIVE PAIRS OF DOTTED LINES IN COLUMNS A, B, C, D, AND E. IF YOU AGREE WITH A STATEMENT, BLACKEN BETWEEN THE TWO DOTTED LINES UNDER THE LETTER A (A FOR AGREE); IF YOU DISAGREE WITH THE STATEMENT, BLACKEN BETWEEN THE TWO DOTTED LINES UNDER THE LETTER D (D FOR DISAGREE). YOU WILL NOT USE THE DOTTED LINES UNDER THE LETTERS B, C, AND E. MAKE NO MARKS IN THE COLUMNS UNDER B, C, AND E. THE COLUMNS UNDER A AND D ARE THE ONLY ONES THAT SHOULD CONTAIN BLACK MARKS.

FOR EXAMPLE, SUPPOSE THE STATEMENT WAS: 101. I WORK ON A DESTROYER. IN ANSWERING THIS YOU WOULD FIND ITEM 101 ON THE ANSWER SHEET AND BLACKEN BETWEEN THE DOTTED LINES IN COLUMN A TO SHOW THAT YOU ARE ON A DESTROYER. IF YOU WERE NOT ON A DESTROYER, THE DOTTED LINES UNDER D WOULD HAVE BEEN BLACKENED.

THERE MAY BE A FEW STATEMENTS THAT YOU ARE SURE YOU DO NOT EITHER AGREE OR DISAGREE WITH. IF YOU ARE POSITIVE THAT YOU CANNOT SAY ONE WAY OR THE OTHER ABOUT A STATEMENT, LEAVE THAT ANSWER BLANK; THAT IS, DO NOT MARK EITHER THE A OR THE D COLUMN.

DO NOT MAKE ANY MARKS ON THE YELLOW BOOKLET. WHEN YOU MAKE A MARK ON THE ANSWER SHEET MAKE SURE THAT IT IS HEAVY AND BLACK AND THAT IT IS IN THE PROPER COLUMN, A OR D. IF YOU MAKE A MISTAKE, BE SURE TO ERASE YOUR MARK COMPLETELY. DO NOT MARK MORE THAN ONE COLUMN FOR ANY ONE ANSWER. THAT IS, MAKE SURE THAT THERE IS ONLY ONE MARK FOR EACH STATEMENT.

DO NOT TURN THE PAGE UNTIL TOLD TO DO SO.

BEFORE YOU BEGIN, THERE ARE A FEW MORE THINGS I WANT TO SAY. REMEMBER, YOU ARE TO TRY TO ANSWER EVERY STATEMENT. THAT IS, IF YOU AGREE, EVEN JUST A LITTLE BIT, BLACKEN BETWEEN THE TWO DOTTED LINES UNDER A. OR IF YOU DISAGREE, EVEN ONLY A LITTLE BIT, BE SURE TO PUT A BLACK MARK IN THE DISAGREE COLUMN. THE ONLY TIME

YOU SHOULD LEAVE AN ANSWER BLANK IS WHEN IT ABSOLUTELY DOES NOT APPLY TO YOU, OR YOU ABSOLUTELY HAVE NO OPINION. REMEMBER, THE COLUMN WITH THE A OVER IT IS THE AGREE COLUMN, THE COLUMN WITH THE D IS THE DISAGREE COLUMN.

(PAUSE)

BE SURE TO READ EACH STATEMENT CAREFULLY. YOU WILL HAVE ALL THE TIME YOU NEED TO FINISH, SO DO NOT HURRY. WHEN YOU HAVE FINISHED, STAY SEATED AND REMAIN AT EASE UNTIL EVERYONE ELSE IS THROUGH.

ALL RIGHT, TURN THE PAGE AND START NOW.

(NOTE STARTING TIME. CHECK EACH MAN'S ANSWER SHEET FOR LEGIBILITY AND COMPLETENESS OF PERSONAL DATA. AFTER YOU HAVE FINISHED THIS CHECK, RECHECK EACH ANSWER SHEET TO INSURE THAT ANSWERS ARE BEING PROPERLY MARKED. PLACE THE PRA-PN WORKSHEETS AND ROSTERS FACE DOWN ON TABLES WHILE THE MEN ARE WORKING. COLLECT THE BOOKLETS AND ANSWER SHEETS FROM THOSE WHO FINISH BEFORE THE REST AND CHECK THE ANSWER SHEETS FOR OMITTED ITEMS. AT THE END OF 30 MINUTES SAY:)

IF YOU HAVEN'T YET FINISHED PUT WHAT YOU ARE WORKING ON ASIDE AND TAKE ONE OF THE ROSTERS AND ONE OF THE GRAY SHEETS. DO NOT WRITE YOUR NAME ON THIS SHEET. THE ROSTER CONTAINS YOUR NAME AND THE NAMES OF YOUR SHIPMATES. YOU WILL BE TOLD LATER WHAT YOU ARE TO DO WITH THIS ROSTER.

TAKE THE GRAY WORKSHEET AND FOLD IT ON THE DOTTED LINE SO THAT THE PRINTING IS INSIDE, LIKE THIS. WATCH ME. (DEMONSTRATE) GO AHEAD AND DO THIS. (AFTER EVERYONE HAS DONE THIS SAY:)

NOW READ THE DIRECTIONS TO YOURSELF AS I READ THEM TO YOU: ON THIS PAGE ARE TWO STATEMENTS. THEY TELL YOU TO SELECT FROM THE ROSTER THE 5 MEN THAT ARE BEST

LIKED AND THE 5 MEN THAT ARE LEAST LIKED. YOU MAY NOT DISLIKE ANYONE, BUT THERE ARE ALWAYS SOME MEN WHO ARE NOT VERY POPULAR. IN ANSWERING THESE ITEMS GO OVER THE ROSTER CAREFULLY AND BE SURE THAT YOU PICK THE MEN WHO ARE REALLY THE BEST LIKED AND THE MEN WHO ARE LEAST LIKED.

THE MEN MUST BE ON THE ROSTER. THIS IS IMPORTANT. THE MEN MUST BE ON THE ROSTER.

TO THE LEFT OF EACH NAME ON THE ROSTER IS A NUMBER, INSTEAD OF WRITING THE MEN'S NAMES USE THE NUMBERS.

ONE LAST THING BEFORE YOU BEGIN. IF YOU HAVE ANY QUESTIONS, RAISE YOUR HAND. DO NOT CONSULT WITH, OR GIVE YOUR OPINIONS TO, THE OTHER MEN. WHEN YOU ARE FINISHED, KEEP YOUR PAPER. THEY WILL BE COLLECTED AT THE PROPER TIME.

ALL RIGHT, YOU MAY START NOW.

(WHILE THIS FORM IS BEING FILLED OUT, FINISH CHECKING THE PRA-JA INVENTORY ANSWER SHEETS ALREADY COLLECTED TO MAKE SURE THEY ARE COMPLETED. IF A SHEET IS INCOMPLETE, HAVE IT FINISHED AT END OF THE SESSION. IF MORE THAN FOUR OF THE ITEMS HAVE BEEN OMITTED, THE ANSWER SHEET SHOULD BE HANDED BACK. ALSO CHECK ITEMS FOR DOUBLE MARKS. SUCH ITEMS CANNOT BE CONSIDERED VALID, AND BEFORE THE END OF THE SESSION, THEY SHOULD BE BROUGHT TO THE ATTENTION OF THE SUBJECTS CONCERNED. COLLECT PRA-PN WORKSHEETS ONE AT A TIME AS THE MEN FINISH. MAKE SURE THAT EACH HAS 10 NUMBERS ON IT. DISMISS EACH MAN WHEN YOU HAVE CHECKED HIS PAPER. PUT THE NAME OF ANY MAN WHO CANNOT BE PERSUADED TO FILL IN ALL 10 NUMBERS IN THE UPPER RIGHT HAND CORNER OF HIS WORKSHEET.)

ADMINISTRATIVE DIRECTIONS -- SECOND SESSION

(BEFORE THE SECOND SESSION PLACE A COPY OF THE MFFC PERSONALITY INVENTORY TOGETHER WITH A 10X12 ANSWER SHEET, FACE DOWN AT EACH AVAILABLE SPACE. DISTRIBUTE THE PENCILS AT THIS TIME. AFTER MUSTER HAS BEEN COMPLETED SAY:)

AT THIS SESSION YOU WILL FILL OUT THE LAST FORM OF THE RESEARCH STUDY.
DOES EVERYONE HAVE A PINK BOOKLET, A WHITE ANSWER SHEET, AND A SPECIAL PENCIL?

(PAUSE)

TAKE THE WHITE ANSWER SHEET AND PRINT YOUR LAST NAME IN CAPITAL LETTERS IN THE SPACE MARKED "NAME", THEN YOUR FIRST NAME AND THEN YOUR MIDDLE INITIAL.

(PAUSE)

PUT YOUR SERIAL NUMBER IN THE SPACE FOR IT, AND YOUR RATE IN THE LAST SPACE.

(PAUSE)

Now, UNDER YOUR NAME PUT (SHIP'S NAME)

(PAUSE)

NOW TAKE THE PINK BOOKLET AND READ THE COVER PAGE TO YOURSELF AS I READ IT ALOUD.

(PAUSE)

ONE OF THE TOUGHEST JOBS YOU CAN DO IS TO JUDGE YOURSELF. THIS JOB IS WHAT YOU ARE ASKED TO DO NOW.

IN THIS BOOKLET YOU WILL FIND MANY STATEMENTS ABOUT YOURSELF, SOME OF THEM ARE CLOSE TO THE TRUTH ABOUT YOU, OTHERS ARE NOT SO TRUE, AND STILL OTHERS WILL NOT APPLY TO YOU AT ALL.

THE STATEMENTS ARE DIVIDED INTO GROUPS OF THREE. THE THREE STATEMENTS OF EACH GROUP ARE LETTERED, A, B, AND C. YOUR JOB IS TO:

1. READ CAREFULLY EACH GROUP OF STATEMENTS.
2. DECIDE WHICH OF THE THREE STATEMENTS IS MOST LIKE YOU.
3. DECIDE WHICH IS LEAST LIKE YOU.
4. MARK THE ANSWER SHEET.

HERE IS THE FIRST GROUP OF STATEMENTS.

- 1 A. YOU HAVE SOMETIMES HAD SUDDEN CHANGES IN MOODS WITHOUT A REASON.
- B. YOU LIKE TO BE BY YOURSELF A GREAT DEAL.
- C. YOU GET STAGE FRIGHT.

AFTER HAVING CAREFULLY READ THE THREE STATEMENTS YOU NOW PICK THE ONE THAT IS MOST LIKE YOU AND THE ONE THAT IS LEAST LIKE YOU. NOW LOOK AT THE ANSWER SHEET FOR GROUP 1. MARK THE ANSWER SHEET BY BLACKING OUT THE M (FOR THE MOST LIKE YOU) NEXT TO THE LETTER THAT STANDS FOR YOUR CHOICE.

DO THAT NOW.

(PAUSE)

NOW BLACK OUT THE L (FOR LEAST LIKE YOU) FOR THE STATEMENT YOU FEEL IS LEAST LIKE YOU. LEAVE UNMARKED THE M AND L OF THE STATEMENT THAT REMAINS.

NOW LOOK AT THE NEXT PAGE OF YOUR BOOKLET.

(PAUSE)

NOTICE THAT FOR EACH OF THE PROPERLY MARKED ANSWERS, ONE M IS BLACKED OUT, ONE L IS BLACKED OUT, AND ONE CHOICE IS LEFT BLANK.

ONE OF THE THINGS THAT WILL MAKE THIS A HARD JOB FOR YOU IS THE FACT THAT SOMETIMES YOU WILL FEEL THAT ALL THREE STATEMENTS ARE EQUALLY TRUE ABOUT YOU OR EQUALLY FALSE ABOUT YOU.

YOU SHOULD HOWEVER MAKE DECISIONS AMONG THEM. CHOOSE AMONG THEM EVEN IF YOU DO NOT FEEL SURE. MAKE ONLY TWO MARKS FOR EACH GROUP OF THREE; BLACK OUT ONE M AND ONE L.

IF YOUR ANSWER TO THE FIRST ITEM IS NOT EXACTLY LIKE ONE OF THE SIX EXAMPLES DO NOT ANSWER ANY OTHER ITEMS UNTIL I HAVE CHECKED WITH YOU. THE REST OF YOU CAN GO AHEAD WITH ITEM 2 AT THE TOP OF THE NEXT PAGE. MAKE NO MARKS IN THE BOOKLET.

(CHECK EACH MAN'S ANSWER SHEET FOR LEGIBILITY AND COMPLETENESS OF PERSONAL DATA. INSURE THAT ALL MEN ARE MARKING THE ITEMS PROPERLY. ITEM MARKING SHOULD BE CHECKED SEVERAL TIMES DURING THE SESSION. EXPERIENCE WITH THE FORM HAS SHOWN THAT MEN START OFF PROPERLY AND LATER MARK ANSWERS INCORRECTLY. COLLECT BOOKLETS AND ANSWER SHEETS INDIVIDUALLY. DISMISS EACH MAN WHEN HE FINISHES. DO NOT ACCEPT AN ANSWER SHEET WITH MORE THAN FOUR ITEMS OMITTED.)